

Five-Year Review Report

Third Five-Year Review Report

for

Waite Park Wells Site

**Including the Electric Machinery OU 1/Site
and the Burlington Northern Car Shop Waite Park OU 2/Site**

City of Waite Park, Stearns County, Minnesota

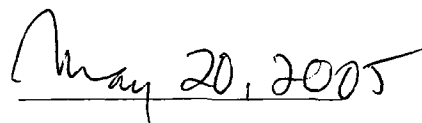
February 2005

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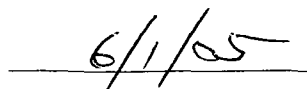
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WAITE PARK WELLS FIVE-YEAR REVIEW REPORT

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Affidavit of Thomas J. Patnode, July 21, 1986
Quit Claim Deed, August 20, 1986
Affidavit, December 28, 1989
Warranty Deed, December 14, 1989
Access Agreement, December 28, 1989
Warranty Deed, September 13, 1995
Quit Claim Deed, March 20, 1997
Affidavit of Richard Miller, March 20, 1997
Easement and Declaration of Restrictions and Covenants, May 6, 1997
Easement, June 11, 1997, filed June 26, 1997
Affidavit Concerning Real Property Contaminated with Hazardous Substances, May 1, 2001
Affidavit Concerning Real Property Contaminated with Hazardous Substances, October 16, 2001
Affidavit Concerning Real Property Contaminated with Hazardous Substances, November 16, 2001
Modification of Easement and Declaration of Restrictions and Covenants, December 21, 2001

APPENDIX G - MINNESOTA STATUTES REGARDING INSTITUTIONAL CONTROLS

The MPCA wishes to acknowledge the assistance and cooperation of the U.S. Environmental Protection Agency, Asea Brown Boveri, Inc., Cooper Industries, Inc., Burlington Northern and Santa Fe Railway Company, their consultants Barr Engineering Company and ThermoRetec Consulting Corporation, and the City of Waite Park in producing many of the figures, tables, and data for this report.

LIST OF ACRONYMS

ACL	Alternate Concentration Level
AMR	Annual Monitoring Report
AOC	Administrative Order of Consent
ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act, federal Superfund law
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System, a national database with active sites and related information
C.F.R.	Code of Federal Regulations
City	City of Waite Park
COC	Contaminant of Concern
1,1-DCA	1,1-Dichloroethane
1,2-DCE	1,2-Dichloroethene
DWSMA	Drinking Water Supply Management Area
EPA	United States Environmental Protection Agency
FS	Feasibility Study
GIS	Global Information System
HBV	Health Based Value
HI	Hazard Index
HQ	Hazard Quotient
HRL	Health Risk Level
IC	Institutional Control
IRIS	Integrated Risk Information System
LTU	Land Treatment Unit
MCES	Metropolitan Council Environmental Services
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDH	Minnesota Department of Health
MERLA	Minnesota Environmental Response and Liability Act, state Superfund law
<u>Minn. Stat.</u>	<u>Minnesota Statutes</u>
MPCA	Minnesota Pollution Control Agency
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PAH	Polyaromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene/ Perchloroethylene/Tetrachloroethene
PLP	Permanent List of Priorities
PRP	Potentially Responsible Party

RA	Remedial Action
RAGS	Risk Assessment Guidance for Superfund
RAL	Recommended Allowable Limit
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RD/RA	Remedial Design/ Remedial Action
RFRA	Request for Response Action
RI/FS	Remedial Investigation/ Feasibility Study
ROD	Record of Decision
RP	Responsible Party
SARA	Superfund Amendments and Reauthorization Act of 1986
Site	Waite Park Wells NPL Site
site	State PLP Site, EM or BN NPL Site OU
TBC	To Be Considered
1,1,1-TCA	1,1,1-Trichloroethane
TCE	Trichloroethylene/ Trichloroethene
VIC	Voluntary Investigation and Cleanup
VOC	Volatile Organic Compound
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
UU/UE	Unlimited Use and Unrestricted Exposure
WasteLAN	EPA national database for planning, tracking and describing sites, activities
WHPA	Wellhead Protection Area
WPMI	Waite Park Manufacturing, Inc.

EXECUTIVE SUMMARY

The Waite Park Wells Site (Site) is listed on the National Priority List (NPL), consisting of the wellfield area in the City of Waite Park (City) and adjacent source properties formerly or presently owned by the Electric Machinery Manufacturing Company and the Burlington Northern Railway Company (BN). These properties are operable unit 1 and operable unit 2 respectively, and each had several source areas with releases and threats of release. The Burlington Northern and Santa Fe Railway Company (current name) is the responsible party for the BN site. The responsible parties (RPs) for the Electric Machinery site are the Electric Machinery Manufacturing Company, Cooper Industries, Inc., Brown Boveri & Company Ltd. and Dresser Industries, Inc. The U.S. Environmental Protection Agency (EPA) has deferred enforcement to the Minnesota Pollution Control Agency (MPCA) under the Enforcement Deferral Pilot Project. Administratively, the MPCA has listed each area as a site on its Permanent List of Priorities (PLP): Waite Park Wells site, Burlington Northern Car Shop Waite Park (BN) site, and Electric Machinery (EM) site. The trigger for this five-year review was the EPA approval date for the previous five-year review.

Volatile organic compounds (VOCs) were detected at concentrations exceeding maximum contaminant levels (MCLs) in the Waite Park municipal water supply in 1984. A packed tower aeration system (air stripper) was installed in 1988 to treat the ground water prior to consumption. The City installed another municipal well and built a new, larger treatment facility in 2002. The City continues to pump ground water from the municipal well field and treats the water prior to consumption.

The remedy at the EM site consisted of ground water removal, treatment and discharge to the Sauk River. After ten years of ground water pumping, additional soil investigation was performed in 1999 to identify potential source areas for continuing ground water impacts. As a result, contaminated soil along the southwest portion of the site was excavated and transported off-site for disposal. A ground water sump was installed and contaminated ground water was pumped to the remediation building for treatment prior to discharge to the Sauk River. Ground water pumping from the shallow aquifer and ground water discharge from the sump were discontinued in April 2001 as part of a test shut down. Other source areas were identified near the EM building during the 1999 soil investigation in the vicinities of the former paint booth, well EM9S and well PW-1. Soil vapor extraction (SVE) was performed at EM9S from October 2000 to July 2002.

The ongoing remedial actions at the EM site consist of ground water monitoring and reporting. Vapor intrusion has not been directly addressed for all on-site and off-site buildings over the source areas and plume, including the EM building, the new building addition, and several business buildings east and downgradient of the EM site. The ROD requires that a deed notice be placed on the property pursuant to Minn. Stat. Ch. 115B.16, Subd.2. The EM site has not been cleaned up to unlimited use and unrestricted exposure (UU/UE), so an Institutional Controls plan needs to be completed and implemented,

including the placement of an easement/declaration of restrictions and covenants on areas that do not allow UU/UE.

The BN site is remediated in three operable units: OU1 is the former waste disposal lagoons, OU2 is the sandblast impacted soil, and OU3 is the shallow ground water aquifer. Contaminated soil from OU1 and OU2 on the BN site was excavated and placed in an on-site containment cell on the BN site in 1995. Ground water monitoring was initially performed at monitoring wells located across the BN site and is currently performed at four monitoring wells located adjacent to the containment cell. The remaining monitoring wells on the BN site have been abandoned. Several phases of soil investigation and remedial actions have been completed on the BN site since 1999 during the process of redevelopment. The primary contaminant of concern was lead. The remedial actions generally consisted of soil excavation, stabilization and off-site disposal. BN has sold portions of the original property to various parties. The portion of the property with the Waite Park municipal wells and treatment building along with development property totaling 126 acres was deeded to the City. The far western portion of the BN site is currently a City park on the Sauk River. Other portions were developed as businesses and as the West River Business Park. The ROD states that deed restrictions shall be placed on any area that is not remediated to unrestricted land use remediation levels and on the property containing the containment facility. A deed notice (affidavit) for the entire site, other deed notices (affidavits), an Easement, and a Declaration of Restrictions and Covenants have been placed on portions of the BN site. Additional easement/restrictions and covenants need to be implemented on areas of the BN site that do not allow UU/UE, some of which are in the MPCA approval process.

The remedies for the Waite Park wells and the BN site are functioning as intended and are currently protective of human health and the environment.

A protectiveness determination of the remedy at the EM site cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions:

1. Complete a Vapor Intrusion Assessment for indoor air at the EM building and any off-site buildings located over the plume, and take response actions appropriate to the results; and
2. When the new PCE and TCE risk assumptions become available on IRIS, complete the evaluation of whether PCE and TCE cleanup goals in groundwater are protective.

These response actions are anticipated to take about two years, at which time a protectiveness determination will be made.

Long term protectiveness at all three sites will be achieved when ground water cleanup goals have been achieved and the remaining institutional controls and institutional controls monitoring plans are in place.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site name (<i>from WasteLAN</i>): Waite Park Wells		
EPA ID (<i>from WasteLAN</i>): MND981002249		
Region: 5	State: MN	City/ County: City of Waite Park/ Stearns County
SITE STATUS		
NPL status: Final		
Remediation status (choose all that apply): Operating		
Multiple OUs? Yes	Construction completion date: 9 / 21 / 1999	
Has site been put into reuse? Yes – Partially		
REVIEW STATUS		
Lead agency: State		
Author name: Maureen Johnson		
Author title: Project Leader	Author affiliation: Minnesota Pollution Control Agency	
Review period: 1 / 1 / 2000 to 12 / 31 / 2004		
Date(s) of site inspection: 11 / 3 / 2004		
Type of review: Post-SARA (Statutory)		
Review number: Third (3)		
Triggering action: Previous Five-Year Review Report		
Triggering action date (<i>from WasteLAN</i>): 2/14/2000		
Due date (<i>five years after triggering action date</i>): 2/14/2005		

- [“OU” refers to operable unit.]

Five-Year Review Summary Form, cont'd.

Issues:

1. VOCs concentrations at the municipal wells are decreasing and being treated, but contaminant concentrations above the cleanup levels remain in the aquifer.
2. While currently protective, the adequacy of the EM ROD's PCE and TCE cleanup numbers cannot be determined until EPA Headquarters completes the PCE and TCE risk assessments.
3. Residual soil contamination remains on the EM property. Ground water has not yet achieved cleanup levels under the EM site and other properties. The EM site does not support unlimited use and unlimited exposure. An IC Plan needs to be completed for the EM site to implement land and ground water use restrictions.
4. Prior to the test shut down, the ground water remediation system discharge to the air stripper at the EM site had reached asymptotic levels of contamination that are still above the ground water cleanup levels. VOC concentrations in well EM8S, located downgradient from well PW-1, have also remained above the ROD cleanup levels.
5. The reasons for a VOCs increase in EM8S after the pumpout shutdown are uncertain, but may include effects of the higher capacity pumping of municipal well 5, municipal wells pumping management, water table shifts mobilizing source material, or other causes. Well 8S is downgradient of PW1 and one of the known sources.
6. A list and map have not been compiled over time showing which EM monitoring wells have been abandoned and which wells remain.
7. Vapor intrusion has not been directly addressed for all on- and off-site buildings over the source areas and plume, including the EM building, the new building addition, and several business buildings east and downgradient of the EM site.
8. Residual soil contamination remains on the BN site. Ground water is still at risk due to the remaining soil contamination on the BN property. The BN site does not support unlimited use and unrestricted exposure. Some ICs restricting land and ground water use have been implemented at the BN site, however, additional ICs and documentation of existing ICs are needed. An IC plan needs to be completed for the entire BN site.

Five-Year Review Summary Form, cont'd.

Issues, Continued

9. Some maintenance issues with the fence at the containment cell on the BN site need to be addressed to maintain security.
10. The reason for the increase in the leachate volume in the collection sump at the BN containment cell is not understood.
11. Development of property continuing to occur on-site may cause possible changes in use.

Recommendations and Follow-up Actions:

1. The City should continue air stripper treatment and monitoring VOC concentrations at the Waite Park municipal wells, prior to treatment, at the midpoint, and post treatment.
2. For the EM ground water, MPCA should conduct the PCE, TCE, and mixtures risk review when EPA completes the PCE and TCE risk assessments.
3. EM RPs should submit and implement an IC Plan (including the IC Monitoring Plan), for the EM site and for the properties over the plume, that meets the requirements to be developed by MPCA; assure that ICs appear within the chain of title; document existing ICs; complete and record the IC easement/declaration of restrictions and covenants for a minimum of the following land and ground water restrictions as applicable that prohibit:
a) disturbance of soil at the EM site property unless pursuant to a work plan approved by the MPCA Commissioner; b) well drilling and use of ground water in the plume until cleanup levels are achieved; c) inappropriate uses of the EM site land including residential use where soils exceed the residential standard or unlimited use and unrestricted exposure.
4. EM RPs and MPCA should evaluate effectiveness of the test shut down of the ground water remediation system at the EM site and determine whether to continue with the pumping system shut down or to reinitiate ground water pumping.
5. EM RPs should continue monitoring and further evaluation of the pumpout effect from the WPW water supply, for a better understanding of reasons for a recent increase at EM well 8S after the pumping shutdown.

Five-Year Review Summary Form, cont'd.

Recommendations and Follow-up Actions, cont'd:

6. EM RPs should identify which monitoring wells have been abandoned and which wells remain, optimize the monitoring plan at the EM site, and continue ground water monitoring. In the annual monitoring reports, EM should make recommendations for changes in the plan based on the new data.
7. EM RPs should complete a Vapor Intrusion Assessment for indoor air at the EM building and any off-site buildings located over the plume, and take actions appropriate to the results.
8. BN should submit and implement an IC Plan (including the IC Monitoring Plan), for the BN site that meets the requirements to be developed by MPCA; assure that all ICs appear within the chain of title; document existing ICs; provide maps documenting the locations and associated ICs; and complete and record the remaining IC easements/declarations of restrictions and covenants for a minimum of the following land and ground water restrictions as applicable that prohibit: a) interference with or disturbance of the cap and contaminated soils located within the containment cell; b) disturbance of subsurface soils at the BN site properties in areas where contaminated soils may exceed industrial cleanup levels; c) well drilling and use of ground water until cleanup levels are achieved; d) residential use of land where soils may exceed the residential level or UU/UE, including Area A where the only allowed uses are public park or industrial/commercial; and e) any use of land other than industrial/commercial on Areas B-H.
9. BN should complete repairs to the fence, minimize access under the fence at the stormwater rip-rap areas, and continue maintenance at the BN containment cell.
10. BN should determine the reason for the increase in leachate volume and continue ground water monitoring at the BN containment cell.
11. EM RPs and BN should assure that further development occurs in compliance with approved response actions. The planned EM site and BN site agreements for O&M should have a periodic review provision to assure IC compliance and effectiveness.

Five-Year Review Summary Form, cont'd.

Protectiveness Statements:

The remedies for the Waite Park wells and the BN site are functioning as intended and are currently protective of human health and the environment.

A protectiveness determination of the remedy at the EM site cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions:

1. Complete a Vapor Intrusion Assessment for indoor air at the EM building and any off-site buildings located over the plume, and take response actions appropriate to the results; and
2. When the new PCE and TCE risk assumptions become available on IRIS, complete the evaluation of whether PCE and TCE cleanup goals in groundwater are protective.

These response actions are anticipated to take about two years, at which time a protectiveness determination will be made.

Long term protectiveness at all three sites will be achieved when ground water cleanup goals have been achieved and the remaining institutional controls and institutional controls monitoring plans are in place.

Other Comments:

The ability to achieve the ground water cleanup goals by the EM ground water pumpout system is currently being assessed by MPCA since the system has reached asymptotic contaminant levels that are still above the cleanup levels.

**Waite Park Wells Superfund Site
Waite Park, Minnesota**

THIRD FIVE-YEAR REVIEW REPORT

I. INTRODUCTION

The purpose of the Five-Year Review is to determine whether the remedy at the Waite Park Wells Site (Site) is protective of human health and the environment. The methods, findings and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues during the review, if any, and identify recommendations to address them.

The Agency is preparing this Five-Year Review report pursuant to CERCLA Section 121 and the National Contingency Plan (NCP). CERCLA Section 121 states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to ensure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgement of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such actions.

The Agency interpreted this requirement further in the NCP; 40 Code of Federal Regulations (C.F.R.) Section 300.430 (f) (4) (ii) states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after initiation of the selected remedial action.

The MPCA staff has completed a Five-Year Review of the remedial actions conducted at the Waite Park Wells Site in Waite Park, Minnesota. This Five-Year Review evaluates whether the remedial actions remain protective of public health, welfare, and the environment and was conducted from October 2004 through February 2005.

This review focuses on the protectiveness of the Waite Park Wells Site remedial actions 15 years from the time the remedial actions commenced in 1989. This is the third Five-Year Review completed by the MPCA staff. The MPCA staff completed the first Five-Year Review on March 30, 1995 and the second Five-Year Review on February 14, 2000.

The triggering action for this Five-Year Review is the completion date of the second Five-Year Review.

II. SITE CHRONOLOGY

Table A: Chronology of Site Events

Date	Event
1969–1977	Waste solvents were discharged into a sump and unregulated waste disposal area at the EM site.
1950-1970	Waste oil, paint, solvents and other wastes were released on the BN site.
12/1984	VOCs were detected in the Waite Park water supply wells.
2/4/1985	Emergency connection between the cities of Waite Park and St. Cloud to provide drinking water to the City of Waite Park.
10/22/1985	MPCA issued a RFRA to Burlington Northern Railway Company.
3/4/1986	Remedy selected for the Waite Park municipal wells.
3/25/1986	MPCA issued an RFRA to Brown Boveri & Company Ltd. and Cooper Industries, RPs associated with the EM site.
4/30/1986	EM site was listed on the PLP.
4/30/1986	Waite Park Wells site was listed on the PLP.
6/10/1986	Waite Park Wells Site was listed on the National List of Priorities (NPL) with EM and BN sites as Operable Units.
9/23/1986	MPCA issued a RFRA to Dresser Industries, Inc. and the Electric Machinery Manufacturing Company as additional responsible parties associated with the EM site.
9/30/1986	Waite Park Wells RA report recommending an air stripper was approved.
2/19/1988	Ground water treatment system was installed to treat the municipal water supply and the Waite Park wells were placed back into service.
6/1/1988	On-Site Construction begins at EM site.
9/1988	Ground water pumping and treatment was begun at the EM site.
1/5/1989	ROD was issued for the EM site.
1/19/1989	RD completed for EM site.
12/30/1989	BN site was listed on the PLP.
4/1992	MDH advises MPCA of children's imminent health hazard due to lead.
4/2/1992	MPCA required Emergency Removal Action for site posting and consolidation of contaminated sand.
4/2/1992	MPCA approved Interim Response Actions proposal required in RFRA.
3/1993	MDH issued a Public Health Assessment for the Site.
5/4/1994	MPCA approved the FS with modifications.
7/14/1994	ROD was issued for the BN site.
1995	BN completed containment cell RA on-site with contaminated soil.
3/1995	First Five-Year Review was completed.

8/1998	An ESD was issued for the BN site.
9/21/1999	Preliminary Close Out Report for the NPL WPW site was issued.
1999	Soil contaminated with cosmoline and VOCs was excavated near location of EM35s.
11/1999-4/2001	A dewatering sump was installed at the EM soil excavation location with discharge to the air stripper and operated until the test shutdown of the ground water remediation system.
1999- 2002	Lead contaminated soil from the BN site was excavated, stabilized and transported to an off-site landfill for disposal.
2/2000	Second Five-Year Review for the NPL WPW Site was completed.
2000	SVE system installed and operated near EM9S
1988 to 4/2001	Until the test shutdown of the system, ground water was pumped at the pumpout wells at the EM site and air-stripped before discharge to the Sauk River.
7/2/2002	BN state site was deleted from the PLP with all RA actions completed.
Ongoing	Ground water monitoring is continuing at the EM site and around the containment cell at the BN site with annual monitoring reports.
Ongoing	Ground water pumped from the municipal wells is treated prior to distribution.

III. BACKGROUND

Physical Characteristics

The Waite Park Wells Site (Site) is located in Waite Park, Stearns County, Minnesota, in Sections 8 and 9, T124N, R28W. The Site is flat sand plain with glacial deposits overlying granite that outcrops near the Sauk River at the west boundary. The new containment cell is the highest point in the area. Except for the park on the west, most of the site has vegetation typical of commercial areas. The Site is located within the City of Waite Park, which has a population of over 5,000, and the Sauk River on the western boundary is the most environmentally sensitive feature.

The Waite Park Wells Site is listed on the federal National Priority List (NPL). The Site consists of the wellfield area in the City of Waite Park (City) and two adjacent source properties formerly or presently owned by the Electric Machinery Manufacturing Company and the Burlington Northern & Santa Fe Railway Company. These two source areas are operable units of the federal Waite Park Wells Site. The Burlington Northern and Santa Fe Railway Company (current name) is the responsible party for the BN site. The responsible parties (RPs) for the Electric Machinery site are the Electric Machinery Manufacturing Company, Cooper Industries, Inc., Brown Boveri & Company Ltd. and Dresser Industries, Inc. The U.S. Environmental Protection Agency (EPA) has deferred enforcement to the Minnesota Pollution Control Agency (MPCA) under the Enforcement

Deferral Pilot Project. Administratively, the MPCA has listed each area as a site on its Permanent List of Priorities (PLP): Waite Park Wells site, Electric Machinery (EM) site, and Burlington Northern Car Shop Waite Park (BN) site (Figure 1).

Land and Resource Use

At the time of discovery of contamination, two Waite Park water supply wells were located on the BN property, a 202-acre parcel of land located in Waite Park. In 1986, BN deeded a majority of the land to the City of Waite Park, including the land with the municipal wells and treatment building. The City installed two additional wells at the Site in 1990 and 2001. The City wellfield and water treatment building are located approximately 1/3 mile to the southeast of the EM site and along the east side of the current BN property. The easternmost portion of the City property is vacant land, with a highway and a highway overpass further to the east. The City has sold some of the property, which is used for industrial and commercial purposes. The portion of the BN site located between 10th Avenue and the Sauk River has been developed by the City as a park. The property currently owned by BN is located east of 5th Street and includes the soil containment cell, several buildings which are leased to a third party and vacant land. The EM site is located north of the BN site and northwest of the Waite Park wellfield. The EM site, which consists of 45 acres, is located in the City of St. Cloud and is currently used for industrial purposes.

The EM ROD for the Site indicated that in 1989 the use of the land surrounding the EM site was light industrial and warehousing. The BN ROD in 1995 stated that the area in and around BN included a mixture of light industrial, commercial, water utility, recreational and residential uses. Currently the EM site is surrounded primarily by industrial and commercial properties. The far western portion of the original BN property is a park, with the Sauk River located along the west side of the park. There are residential areas located north and south of the park. There are commercial properties and residences to the south of the BN site, along the south side of 3rd Street. The best ground water production in the City is located at the BN site so this wellfield continues to be developed over time. The future uses of these properties are not anticipated to change significantly.

History of Contamination

The City wells at the Site were drilled in 1963 and 1974. In 1984, the Minnesota Department of Health (MDH) began a program of requiring cities to analyze water supplies, and in December 1984 volatile organic compounds (VOCs) were found in the City well water.

From 1969 to 1977, the Electric Machinery Manufacturing Company owned and operated a gas turbine and electric generator manufacturing facility in St. Cloud. Waste solvents generated at the facility were discharged into the soil and ground water from a paint booth

sump in the building at the EM site. Waste solvent was also released at an unregulated pit in the southwest portion of the site.

BN began operations in Waite Park in 1894. The operation included construction and repair of railroad freight, tank and hopper cars in a car shop. From 1950 to 1970, approximately 10,000 gallons annually of waste oil, paint waste and solvents were disposed of at the railroad yard by landfilling and/or evaporation.

Initial Response and Investigations

Waite Park Wells

In December 1984, VOCs including trichloroethene (TCE), tetrachloroethene (PCE) and 1,1-dichloroethane (DCA) were detected in the City water supply wells. On January 28, 1985, the Minnesota Department of Health (MDH) informed MPCA staff that the City was being advised to discontinue use of its water supply as soon as possible due to unacceptable levels of hazardous substances in the drinking water. On the same day, the MPCA issued a Determination of Emergency, allowing access to State Superfund funding under the Minnesota Environmental Response and Liability Act (MERLA), Minnesota Statutes (Minn. Stat.) chapter (ch.) 115B, to provide City residents with a short-term safe drinking water supply and to undertake an investigation and Feasibility Study (FS) to determine the appropriate long-term drinking water alternative. Nearby St. Cloud businesses provided safe drinking water until an emergency connection between the Waite Park and the St. Cloud water systems was completed on February 4, 1985 to provide safe drinking water until the appropriate long-term water supply system could be constructed in Waite Park. An FS was completed in March 1986 to determine the appropriate long-term drinking water alternative and a remedy was selected. During September 1986, MPCA approved a remedial action which consisted of installation of a packed tower aeration system (air stripper) to remove the VOC contaminants from the water supply prior to consumption. BN and the RPs for the EM site jointly funded and implemented the water treatment system. The City water supply wells were placed back into service in February 1988. The City took over operation and maintenance of the treatment system after construction.

On June 10, 1986 the Waite Park Wells Site was placed on the EPA's National Priorities List (NPL) with a Hazard Ranking System score of 32. The Waite Park Wells, BN and EM sites are listed separately on the state of Minnesota's Permanent List of Priorities (PLP), each with a score of 38.

On October 22, 1985, the MPCA issued a RFRA to BN, citing the BN site as a source of contamination to the City's water wells. On March 25, 1986 and September 26, 1986, the MPCA issued RFRAs to Brown Boveri & Company Ltd., Cooper Industries, Inc., Dresser Industries, Inc., and Electric Machinery Manufacturing for the EM site. The RFRAs also cited the EM site as a source of contamination to the City's wells. The RFRAs requested both BN and the responsible parties for the EM site to conduct a Remedial Investigation/

Feasibility Study (RI/FS) and implement a Remedial Design/ Response Action (RD/RA) plan for a long-term water supply treatment system for the City. The RFRAs also requested that BN and the EM site RPs conduct an RI/FS and implement an RD/RA to address the contamination at their respective sites.

Electric Machinery

The initial ground water assessment determined a layer of glacial till separates an upper sand and gravel unit from a lower sand and gravel unit across portions of the EM site. Both units are water-bearing aquifers. The glacial till forms the base of the upper aquifer and generally acts as an aquitard, which limits flow of ground water and contaminants into the underlying aquifer. In the southeast part of the EM site, the glacial till is absent and the upper and lower aquifers are in contact (a window). This allows contaminants that were released to the upper aquifer to migrate from the upper to the lower aquifer. Pumping of the municipal wells influences ground water flow in both the upper and the lower aquifers due to the connection between the two aquifers, resulting in flow on the EM site to the south and east towards the window, and then flow is east in the lower aquifer toward the municipal wells. On the southern side of the subject properties ground water in the upper aquifer generally flows north under non-pumping conditions, towards the EM site and the area where the glacial till is absent. Ground water in the lower aquifer under non-pumping conditions flows northeast.

Laboratory analysis detected several VOCs in water samples collected from the City water supply system during the initial assessment, including TCE, PCE and DCA.

Analysis of the ground water samples collected during the remedial investigation for the EM site identified several VOCs in the shallow and deep aquifers both on and off the EM site. The contaminant with the highest on-site concentration, as presented in the ROD for the EM site, was PCE, although TCE, 1,1,1-trichloroethane (TCA) and cis- and trans-1,2-dichloroethene (DCE) were also present at significant concentrations. PCE was detected on-site in the shallow aquifer at concentrations as high as 34,000 micrograms per liter ($\mu\text{g/l}$). The deeper aquifer was less contaminated with PCE concentrations of approximately 600 $\mu\text{g/l}$ detected in both on- and off-site wells.

A Record of Decision (ROD) was issued for the EM site on January 5, 1989 which addressed the selected remedy, which generally consisted of ground water pumping, treatment and discharge to the storm sewer. Response actions for the City water supply wells were identified under the ROD for the EM site, thus, a separate ROD was not executed for the City water supply wells. A ROD was issued for the BN site on July 14, 1994, which presented the selected remedy for three operable units (OUs). OU1 consisted of the waste disposal lagoons, OU2 consisted of the impacted sandblast soil, and OU3 addressed the shallow ground water contamination.

BN Car Shop

The BN site was divided into three operable units. The site was further divided into eight sections, lettered A through H (Figure 2). The initial assessment findings and remedial actions for each operable unit are described as follows:

Operable Unit 1. Three lagoons containing approximately 17,500 cubic yards of lubrication oil and grease, oils containing polychlorinated biphenyls (PCBs), cooking oil, solvents and paints existed in Area A. Maximum concentrations of substances detected in samples collected from the lagoons include 570 milligrams per kilogram (mg/kg) of PCBs, 42 mg/kg of arsenic, 4.9 mg/kg of cadmium and 120,000 mg/kg of lead.

Operable Unit 2. Paint containing high concentrations of lead was stripped from railroad cars at a sandblasting station located in Area H. Waste sandblast sand was spread throughout the site. In 1992, BN initiated remedial actions based on a concern for children playing on the site. Approximately 7,000 cubic yards of sandblast sands were excavated in Area H. The soil was stockpiled on-site, covered with plastic and fenced. A fence was also placed around additional sandblast sands in Area A. Analysis of the sandblast sands showed a maximum concentration of 17,000 mg/kg of lead, 18 mg/kg of arsenic and 2.8 mg/kg of cadmium.

Operable Unit 3. Shallow ground water contamination including chlorinated VOCs, acetone, methylene chloride, benzene, toluene, xylenes, oil and grease and methyl ethyl ketone, was noted at several areas, resulting in ground water monitoring being selected as the remedial option.

Basis for Taking Action

Hazardous substances that have been detected above levels indicating excess risk of exposure in each media include:

<u>Soil</u>	<u>Ground Water</u>
Tetrachloroethylene/ Perchloroethylene (PCE)	PCE
Trichloroethylene (TCE)	TCE
1,1,1-Trichloroethane (1,1,1-TCA)	1,1,1-TCA
1,2-Dichloroethene (1,2-DCE)	1,2-DCE
1,1-Dichloroethane (1,1-DCA)	1,1-DCA
Arsenic	Arsenic
Cadmium	Cadmium
Lead	Lead
Polyaromatic Hydrocarbons (PAHs)	PAHs
Polychlorinated Biphenyls (PCBs)	PCBs

IV. REMEDIAL ACTIONS

REMEDY SELECTION

Waite Park Wells

Response actions for the Waite Park water supply wells were identified under the ROD for the EM site, thus, a separate ROD was not executed for the City water supply wells. The selected remedy consisted of treatment of the ground water using a packed aeration tower (air stripper) prior to distribution to the municipal water supply system for consumption.

Electric Machinery

Section VIII of the ROD states “the primary objective is to abate or minimize the continued migration of volatile organic compounds from the Site through the ground water system.” Section X of the ROD states the selected remedy was Alternative IIIB, which consists of:

- Installation of ground water pumpout wells in both the shallow and deep aquifers;
- Treatment of contaminated water with a packed tower aeration system (air stripper); and,
- Discharge treated ground water from the air stripper to the Sauk River.

The EM ROD states that ground water at the site will require two separate but related actions: [1] satisfactory capture of shallow and deep plumes moving north of the site and [2] removal of sufficient quantities of ground water to reduce the concentration of the remaining ground water to the required level. Capture will be achieved by the proper design, placement and operation of shallow and deep pumpout systems. Ground water risk reduction will be achieved by continuing to operate the pumpout system until the more restrictive of MCLs [Maximum Contaminant Levels (MCLs)] or RALs [Recommended Allowable Levels (RALs)] for VOCs in both the shallow and deep aquifers is met. The cumulative excess carcinogenic risk of the two carcinogens, PCE and TCE, at the stated cleanup levels is approximately 1.2×10^{-5} . This level of protection is deemed adequate since no one at the site is actually drinking the water or is likely to since the entire area is served by municipal water. The target cleanup level for the other three contaminants of concern at the site (1,1,1-TCA, 1,2-DCE and 1,1-DCA) are set at the MCL or RAL where no MCL is available. Upon consultation with MDH, it was determined that analysis of cumulative effects of these non-carcinogens was not needed since the systemic effects of each of these contaminants was different.

Table 4 lists each contaminant, its MCL, RAL and target cleanup level. The contaminants and target cleanup levels listed in Table 4 are:

PCE	6.6 µg/l, RAL
TCE	5.0 µg/l, MCL
1,1,1-TCA	200 µg/l, MCL, RAL
1,2-DCE	70 µg/l, RAL
1,1-DCA	810 µg/l, RAL

The ROD states that contaminants outside the zone of remediation at the site which are currently being transported to the Waite Park municipal water supply will be treated by the stripper at that location. The target cleanup levels for on-site VOC contaminants may not be achievable by the selected response action. If that becomes the case, alternate concentration levels may need to be considered.

The EM site cleanup levels for ground water as listed in the ROD are 5.0 for TCE and 200 µg/l for 1,1,1-TCA which are MCLs, and 6.6 µg/l for PCE, 70 µg/l for 1,2-DCE, and 810 µg/l for 1,1-DCA which are RALs.

The ROD also requires that a deed notice be placed on the property pursuant to Ch. 115B.16, Subd.2 of MERLA.

BN Car Shop

The 1994 ROD Remedial Action Objective for the BN site is expressed as a purpose: “to prevent current or future exposure to the contaminated soils and to reduce contaminant migration into the ground water” through the stated objective of “source removal and [meeting] remediation levels.” The selected remedy is Alternative C: Solidification/ Stabilization and On-Site Containment. The selected remedy included the following actions:

- Excavation of the lagoon waste, sandblast sands, and the dirt floor of the paint building on the property now owned by Waite Park Manufacturing, Inc., incorporation of the [previously] consolidated sandblast sands [with the waste]; excavation of the contaminated waste until all visible oily soils and sandblast sands are removed; sampling from the sidewalls and bottom of the excavation to meet the remediation levels; removal and treatment of any visible oil floating on the ground water; backfilling with clean soil, compaction, topsoil and seed.
- Solidification/ stabilization of the waste to reduce the concentration of contaminants to below hazardous levels and to minimize the mobility of the contaminants in the waste material; treatability studies to determine the most appropriate method.
- Placement of the treated waste in a containment facility constructed on-site pursuant to Minn. Rules Chapter 7035 pt. 2815, with a liner system, leachate collection and detection, cover system, ground water monitoring and gas

collection; contingency action plan and post closure requirements conducted pursuant to Minn. Rules Ch. 7035 pt. 2615 and 2645.

- Restrictions would be placed on any area that is not remediated to unrestricted land use remediation levels and on property containing the containment facility.
- Ground water monitoring network installed or upgraded in the vicinity of the lagoons and monitoring well MPCA 14s; ground water monitoring plan.
- Area A was to be remediated to unrestricted land use levels. Areas B through H were to be remediated to commercial/ industrial land use levels.

After the containment cell was constructed, a subsequent assessment documented the presence of additional contaminated soil which was excavated and stockpiled on-site. On August 11, 1998, the MPCA issued an Explanation of Significant Differences (ESD). The ESD presented an Integrated Remedy which allows a risk-based approach to address known and potentially impacted soil at the site with a combination of any of the following remedial actions: excavation, treatment and hauling to an off-site landfill, evaluating risk of exposure to public health and the environment to determine if impacted material may remain in place, and use of engineering and institutional controls to ensure that the remedy remains protective.

The 1998 ESD indicated stockpiled soil [from post-containment cell excavations] would be stabilized and transported to an off-site landfill for disposal with solidification as an option. Treated soil must meet the soil cleanup levels in Table 4 of the ROD and off-site landfill waste acceptance criteria. A risk-based approach would be used to determine whether contamination may remain in place as a part of an integrated remedy, with the use of engineering and institutional controls as necessary to ensure that the remedy remains protective of public health and the environment. The integrated remedy must be developed in accordance with the needs of all affected parties. MPCA approval or conditional approval of proposed actions or contingency plans is required. Institutional control language must include site conditions, use or activity restrictions, and notification of the presence of residual contamination and accompanying controls, and/or assurance that long-term mitigation measures or monitoring requirements (e.g. engineering controls) are carried out and maintained. An example is that Area A requires restrictions on excavation activities due to remaining impacted soil and debris at a depth greater than four feet.

REMEDY IMPLEMENTATION

Waite Park Wells

During September 1986, MPCA approved a remedial action which consisted of installation of a packed tower aeration system to remove the contaminants from the water prior to consumption. BN and the responsible parties for the EM site jointly funded and implemented the water treatment system and the City water supply wells were placed back into service in February 1988. The City took over operation and maintenance of the

treatment system after it was constructed. The City has since installed additional water supply wells in 1990 and 2000, built a new treatment facility with a design for better iron control in 2002 to meet the additional demand for potable water, and decommissioned the original treatment system.

Electric Machinery

EM site RPs installed three pumpout wells, PW-1, PW-2 and PW-3. Wells PW-1 and PW-3 were installed on the eastern portion of the EM site, located south of the main building and east of the thermoplastics wing (Figure 3). Well PW-1 was completed in the shallow aquifer and PW-3 was completed in the deeper aquifer. Pumpout well PW-2 was installed in the shallow aquifer along the western portion of the site and south of the main building.

Beginning in September 1988, ground water was pumped from PW-1 and PW-2 to an on-site remediation building for treatment using a packed aeration tower prior to discharge to the Sauk River. Well PW-3 was not used for ground water extraction. Well PW-2 was abandoned in 1998. Ground water pumping from PW-1 continued through April 2001 when ground water remediation was discontinued as part of a test shut down.

The soil investigation performed during the initial remedial investigation for the EM site identified some localized areas of limited contamination and soil remediation was not required. After ten years of pumpout, EM site RPs looked at ways to reduce costs and time of operation. To determine whether excavation of contaminated soil was a feasible means, an additional soil investigation was conducted during the fall of 1999. The additional investigation identified Source Area 1, a significant volume of contaminated soil in the southwest portion of the site; 2,656 tons of soil were excavated from the former unregulated disposal pit in the southwest portion of the site and disposed of at an industrial landfill. Two other areas of contaminated soil were identified south of the building and east of the thermoplastics wing, located near PW-1 and near the former paint booth.

A soil vapor extraction (SVE) system was installed at monitoring well EM9S, near the former paint booth source area. The SVE system operated from October 2000 through July 2002 and had a radius of influence of approximately 70 feet.

BN Car Shop

Pursuant to the ROD, BN initiated remedial actions at OU1 and OU2 and implemented a ground water monitoring program (OU3). Contaminated soil from the three lagoons at OU1 and sandblast sands from OU2 were excavated and placed in an on-site containment cell in 1994 and 1995 (Figure 2). Several rounds of assessment and remedial actions have been completed across the remainder of the BN site since 1999. The assessment and remedial actions performed since 1999 are discussed later in this review.

Ground water monitoring was performed at four monitoring wells located around the containment cell and at other locations on the BN site. The four monitoring wells located around the containment cell are monitored on a schedule approved by the MPCA. The monitoring wells on the remainder of the BN site were monitored through the late 1990's. These wells were abandoned in 2002.

SYSTEM OPERATION AND MAINTENANCE

No state or federal funds were spent for operation and maintenance on this Site.

Waite Park Wells

The City built a new ground water treatment facility in 2002. The treatment facility includes iron removal and VOC removal with air stripping towers. The Director of Public Works for the City indicated they have an O&M plan for the treatment facility. They also analyze water samples quarterly for VOCs. The quarterly samples are collected from the influent, after the air stripper, and after discharge to the distribution system.

In 2001, the consulting firm of Short Elliott Hendrickson, Inc. (SEH) completed a "Wellhead Protection Area and Drinking Water Supply Management Area Delineations and Vulnerability Assessments" report for the City of Waite Park. In the report, Wellhead Protection Areas (WHPAs) and Drinking Water Supply Management Areas (DWSMAs) were delineated by SEH for all four existing municipal wells. The Minnesota Department of Health defines the WHPA and the capture zone for a well. Using ground water modeling software, SEH calculated one-year, five-year and ten-year WHPAs for the Waite Park municipal wells. Data from the report indicates that the EM site is located within the one-year, five-year, and ten-year WHPAs for Waite Park municipal wells 1, 3, 4 and 5. The entire EM site is also situated within the Drinking Water Supply Management Area for the one-year WHPA. These data indicate that the contaminant plume at the EM site is being captured by the Waite Park Municipal Wells.

Electric Machinery

The ground water remediation system has been shut down since 2001, with no current operation and maintenance associated. Routine ground water monitoring is performed at select monitoring wells based on a schedule approved by the MPCA staff.

BN Car Shop

Maintenance and monitoring at the containment cell is generally performed as proposed in the Contingency Action Plan and Post-Closure Monitoring Plan, Car Shop Site, Containment Cell, January 1997. The current ground water monitoring procedures have been revised by MPCA based on a review of the historical ground water data.

The physical condition of the containment cell, the fence and the monitoring wells are checked quarterly and the vegetative cover is mowed annually. Ground water sampling and analysis is performed annually at the four monitoring wells and quarterly at the sump. The lysimeter is checked quarterly for the presence of leachate. Leachate from the sump is pumped quarterly for disposal.

V. PROGRESS SINCE THE LAST REVIEW

The Five-Year Review completed in 1999 contained several recommendations that are listed below in the order they were presented in the last review. The status of implementation of each recommendation presented in the 1999 review is described immediately following the recommendation. The recommendations and the status are as follows:

Recommendation 1. The pumpout system at the EM site and the treatment system at the City wellfield should continue operation because ground water in the vicinity remains contaminated at levels of concern.

Status: In 2000, the ground water pumpout system at the EM site reached asymptotic (essentially static) levels of contamination that are still above the cleanup levels. The system was shut down during April 2001 to evaluate the effect of discontinued pumping on ground water quality. The pumpout system remains shut down. The operation and testing of the pumpout system occurred until the system was shut down.

Recommendation 1 will apply if ground water pumping is performed in the future at the EM site. Treatment of the ground water pumped from the municipal wells continues and is monitored quarterly by the City.

Recommendation 2. Regular monitoring of influent and effluent at the packed tower aeration system and the EM site pumpout wells should continue. VOC levels in the municipal water should be monitored carefully to ensure that MCLs are not exceeded.

Status: Ground water monitoring is currently not being performed at the EM pumpout wells because the pumpout system was shut down during April 2001. Quarterly water quality sampling and analysis is conducted for the City water supply system.

Recommendation 3. An O&M plan was not in place for the packed tower treatment system, which is why no maintenance was done until the tower malfunctioned. To prevent this in the future, an O&M plan should be developed and implemented. When the new treatment system is built, an O&M plan should be developed and implemented for that system as well.

Status: The City built a new water treatment facility which went into service in 2002. The new treatment facility has iron removal and packed aeration towers for VOC

removal. The Director of Public Works for the City indicated an O&M plan was prepared and implemented.

Recommendation 4. Engineering plans for the new City well and treatment system should be carefully reviewed by the MPCA and MDH to assure that the new components of the water supply system will provide an adequate quantity of an acceptable quality of water for the City.

Status: The City submitted plans and specifications to MDH for review and approval. Installation of the new municipal well was approved by MDH in December 1999 and the plans for the new treatment facility were approved on January 26, 2001.

Recommendation 5. A pumping plan should be developed and implemented which minimizes the use of Well 4, which has not yet become contaminated, to ensure that it remains clean.

Status: A specific pumping plan was not prepared for municipal Well 4. However, the City has since installed a new municipal well (Well 5) in proximity to municipal Well 4. The MDH Staff Hydrogeologist indicated pumping at municipal Well 4 was generally addressed as part of the approval process for the new municipal well and in the wellhead protection plan prepared by the City.

Recommendation 6. Continue with the investigation and remediation of additional lead impacted soils at the BN site.

Status: Additional soil assessment for lead impacts was performed by BN during 2000. Contaminated soil was excavated, stabilized on-site and transported to an off-site landfill for disposal during 2000 and 2001, in accordance with the 1998 BN ESD.

Recommendation 7. Continue monitoring of the BN on-site containment cell.

Status: BN performs monitoring of the physical condition of the containment cell on a quarterly basis. The lysimeter is checked for leachate quarterly. Ground water quality monitoring is performed at the sump quarterly and at the four monitoring wells annually. Leachate is pumped from the sump on a quarterly basis for off-site disposal.

Recommendation 8. Continue operation and maintenance monitoring of the BN remedial actions.

Status: BN is no longer performing site-wide ground water monitoring. The monitoring wells on the BN site, with the exception of the four wells around the containment cell, were approved for abandonment or the ownership was transferred to the City of Waite Park in 2002. The City is using these wells as part of its Wellhead Protection Plan monitoring.

VI. FIVE-YEAR REVIEW PROCESS

Administrative Components

The Five-Year Review was initiated on October 21, 2004. The EM, BN and City representatives were notified of the initiation of the five-year review during October 2004. The review components include:

- Community Involvement;
- Document Review;
- Data Review;
- Site Inspection;
- Local Interviews; and
- Five-Year Review Report Development and Review.

Community Involvement

On November 12, 2004, a notice was published in the St. Cloud Times newspaper announcing that a Five-Year Review was being conducted for the Waite Park Wells site, the EM site and the BN site. A copy of the public notice is presented in Appendix C.

On November 16, 2004, a copy of the public notice announcement was mailed to representatives of the responsible parties, other interested parties and pertinent city, county and state officials.

An announcement of the completion of the Five-Year Review will be mailed to the notice mailing list.

Document Review

This Five-Year Review consisted of a review of relevant documents including the RODs, Annual Monitoring Reports (AMR) with O&M activities and monitoring data, MPCA staff response letters, the previous Five-Year Review reports, and other reports. A list of the documents reviewed is presented in the Bibliography (Appendix D).

The five-year review is being conducted to determine whether the site RAs remain protective of public health and the environment. The more specific purpose of the review is two-fold: (1) to confirm that the remedy as spelled out in the ROD and/or remedial design remains effective at protecting human health and the environment (e.g., the remedy is operating and functioning as designed, institutional controls are in place and are protective), and (2) to evaluate whether original cleanup levels remain protective of human health and the environment. Applicable or Relevant and Appropriate

Requirements (ARARs) and To Be Considereds (TBCs) are key elements in fulfilling these two purposes.

The RAs at the Site must be reviewed and analyzed against the newly promulgated or modified federal and state environmental laws. The RODs discuss ARARS and TBCs. Of these, the ARARs and TBCs which most directly impact protectiveness are discussed here. No newly promulgated laws or regulations are known which will impact the remedy at this time, with the exceptions of MCLs under the Safe Drinking Water Act and the state RALs, Health Risk Levels (HRLs), and Health Based Values (HBVs); these are discussed more thoroughly in Section VII Technical Assessment.

ARARs Specified in the ROD for Waite Park Wells

The response actions for the City water supply wells were completed under the ROD for the EM site; therefore, the EM site ARARs also apply to the City water supply wells.

ARARs Specified in the ROD for Electric Machinery

1. The Resource Conservation and Recovery Act (RCRA), 40 C.F.R. Part 264
Requires removal of all waste residues and soil contaminated with hazardous waste. The ROD indicates that VOCs entering the ground water from the soils will be removed by the shallow aquifer pumpout system at the EM site. Although the pumpout system removes contaminants once they reach the ground water, it is possible that contaminants remain in soils that continue to impact the ground water.
2. Clean Water Act (CWA) 40 C.F.R. Parts 122 and 125
Establishes the National Pollutant Discharge Elimination System (NPDES). Treated ground water is discharged to the Sauk River via the storm sewer system and is regulated through the requirements of a NPDES permit.
3. Safe Drinking Water Act (40 C.F.R. Parts 141 - 146)
Establishes federal maximum contaminant levels (MCLs) and maximum contaminant level goals (MCLGs) for contaminants in public drinking water supplies. Treated ground water from the City water supply wells is currently in compliance with the MCLs. This ARAR also establishes the cleanup goals (MCLs/MCLGs) for contaminated ground water aquifers.
4. Minn. Stat. 115 and 116 and Minn. R. chs. 7001 and 7050
These ARARs regulate the discharge of the treated water to the Sauk River under an NPDES permit.
5. Minn. Stat. 116.07, subd. 4.A
Regulates air emissions of toxic pollutants. At the time the ROD was prepared, the operation of the air stripper did not require a permit. Emissions from the air stripper were

evaluated during the previous Five-Year Review and were found to be below Minnesota's Allowable Emission Rates.

To Be Considered for Electric Machinery

MPCA considered the HBV for 1,4-dioxane established by the MDH in 2002. Sampling at the EM site and the compound-specific analysis was requested in 2004 and showed no detection.

ARARs Specified in the ROD for BN Car Shop

1. CERCLA as amended by SARA, and the NCP
Specific cleanup requirements, preference for permanence, and use of ARARs.
2. 40 C.F.R. 258
Post closure care and monitoring must continue for 30 years.
3. Safe Drinking Water Act, National Primary Drinking Water Standard (40 C.F.R. part 141-143)
Establishes MCLs and Maximum Contaminant Level Goals (MCLGs), health and treatment based numbers for regulating public water supplies and cleanup goals for contaminated ground water aquifers.
4. The Resource Conservation and Recovery Act, Identification and Listing of Hazardous Waste (40 C.F.R. Part 261).
Establishes Land Disposal Restrictions (40 C.F.R. Part 268, Subtitle C of RCRA) which restrict the land disposal of RCRA hazardous wastes, and Ground Water Monitoring Response Requirements (40 C.F.R. 264.94).
5. Clean Air Act
Establishes National Primary and Secondary Ambient Air Quality Standards (40 C.F.R. Part 50)
6. Minn. Stat. 115B (1992) Minnesota Environmental Response and Liability Act
Identifies remedial actions as response to a release to protect the public health and welfare or the environment.
7. Minn. Stat. 115.061 (1992) The Minnesota Pollution Control Act
Provides for protection of the waters of the state by requiring the responsible person to "recover as rapidly and as thoroughly as possible such substance or material and take immediately such other action as may be reasonably possible to minimize or abate pollution of waters of the state caused thereby."

8. Minn. Stat. 115.03 (1992)

Provides that MPCA may require and enforce a permit for any discharge to the waters of the state.

9. Minn. Rules ch 4717 Health Risk Limits

Establishes HRLs for ground water contaminants. HRLs replace RALs where both exist for a contaminant since HRLs are based on more recent risk information and they are promulgated.

10. Minn. Rules ch 7007 and 7009

Provide that Air Emissions and Ambient Air Quality Standards apply during excavation, treatment and construction activities.

11. Minn. Rules ch 7035.2815

Applies to the construction and monitoring requirements of an on-site containment facility under Solid Waste Management.

17. Minn. Rules ch 7060 (1991)

Applies to protection of water quality of waters of the state.

To Be Considereds Listed in the ROD for the BN Car Shop

1. Recommended Allowable Limits

Established by the MDH, Release No. 3, January 1991, are not promulgated, but are health risk levels used by the MPCA where no MCL or HRL exists.

2. 10^{-5} Risk Level

Unpublished September 1985 MDH Report on tolerable risk levels/ exposures.

Data Review

Waite Park Wells

Municipal Well 5 and the new treatment building were brought into service in May 2002. The City is currently pumping from wells 1, 3, 4 and 5 (Figure 12). The new water treatment plant, which removes iron and removes VOCs in air stripping towers, was constructed to improve overall system efficiency and to handle the increased production from Well 5.

The VOC influent concentration for the municipal water supply has fluctuated over the last 6 years as indicated on Figure 13. The influent VOC concentration increased after municipal Well 5 was brought online in May 2002. Data supplied by the City indicates that since late 2002 the influent VOC concentration has decreased and VOCs were not detected in the influent samples collected in January, May and August 2004.

Electric Machinery

The Five-Year Review completed in 1999 referenced additional subsurface investigative work that was to be completed on the EM site. The additional investigative work included further characterization at potential source areas and an evaluation of remedial alternatives to enhance the effectiveness of the existing ground water pumpout system. On August 17 and 18, 1999, all of the functioning on-site monitoring wells were sampled and analyzed for VOCs. On September 13 and 14, 1999, three suspect source areas of contaminated soil were investigated. The assessment included the collection of soil samples from borings and from test trenches for field screening and for laboratory analysis.

The assessment identified additional areas with contaminated soil, which appeared to be an ongoing source for ground water impacts. EM site RPs proposed to excavate soil along the southwest corner of the property in the vicinity of EM35S and install a dewatering system to pump contaminated ground water. They also proposed to perform an SVE test on well EM9S and at a temporary test well to be installed south of EM9S.

Excavation of contaminated soil was completed during November and December 1999 in the vicinity of EM35S. Monitoring well EM35S was properly abandoned pursuant to the requirements of MDH. The contaminated soil was encountered at a depth of 10 to 13 feet. Approximately 8 to 9 feet of overburden soil was removed and stockpiled separately. The contaminated soil was excavated and stockpiled for disposal. The final excavation was approximately 100 feet by 155 feet by 11 to 18 feet deep. A total of 2,656 tons of contaminated soil was transported to the Superior FCR Landfill located in Buffalo, Minnesota for disposal. The stockpiled overburden was used to backfill the excavation.

A dewatering sump was installed on the north end of the excavation. Three hundred feet of perforated drain tile was placed in the excavation and connected to the sump. Ground water was pumped from the sump to the same treatment building used to treat the ground water from the pumpout wells. Ground water pumping was initiated at the sump on April 20, 2000 at a flow rate of 26 gallons per minute (gpm).

Based on the findings of two SVE tests, an SVE system was installed at EM9S during August 2000. The initial testing was performed during September and the system start-up began in October 2000. The SVE system ran continuously through 2001. In 2002, the SVE system was operated every other month through July when the system was shut down due to reduced removal efficiency. The SVE system removed 200.2 pounds of VOCs since start-up, according to the 2002 AMR. Although the SVE test on the temporary test well located south of EM9S indicated that VOCs could be effectively removed, an SVE system was not installed.

The ground water pumpout system originally consisted of three pumpout wells, PW-1, PW-2 and PW-3. Ground water was originally pumped from PW-1 and PW-2 to a

remediation building for treatment using a packed aeration tower prior to discharge to the Sauk River. Well PW-2 was abandoned in 1998. Well PW-3 was not used for ground water extraction. The EM site had a water appropriations permit from the Department of Natural Resources (DNR) for the shallow (permit no. 893231) and the deeper aquifer (permit no. 893230). The permits were terminated in June of 2003.

The 2001 AMR stated that since system startup in 1989, an estimated 382 million gallons of ground water containing 2,926 pounds of VOCs have been removed from the shallow aquifer. Ground water was pumped from PW-1 until April 16, 2001 when ground water extraction was discontinued as part of a test shut down due to a decreasing contaminant removal rate. The test shut down remains in place as of this review date.

The VOC concentrations at PW-1 have decreased considerably (Figure 4). The highest PCE and TCE concentrations detected at PW-1 in the early 1990's were 1,500 $\mu\text{g/l}$ and 1,800 $\mu\text{g/l}$, respectively. In a ground water sample collected on October 8, 2002, the only target VOC detected was PCE at a concentration of 4.8 $\mu\text{g/l}$. Well PW-1 has not been sampled since October 2002.

As previously mentioned, ground water from the sump located along the southwestern portion of the site was also pumped to the treatment building for treatment prior to discharge to the Sauk River. Discharge of treated ground water from the pumpout wells and from the sump to the Sauk River is regulated by an NPDES permit (permit no. MN 0058939). The permit was terminated on June 13, 2003.

Ongoing ground water monitoring is performed at select monitoring wells as proposed in the annual monitoring reports and approved by the MPCA. The ground water monitoring includes the collection of water levels and ground water samples for laboratory analysis.

Under water supply pumping conditions at the municipal wells, the horizontal ground water flow direction is generally to the east in both the shallow and deeper aquifer based on the ground water elevations collected during January 2004 (Figures 5 and 6). The current horizontal flow direction is consistent with the historical pumping conditions flow direction, in that flow was south and east on the EM site in the surficial aquifer toward the window, thence east in the lower aquifer to the municipal wells.

The ground water samples collected from the monitoring wells were typically analyzed for the VOCs identified in the ROD. The MPCA requested additional analytes in their April 14, 2004 letter, including 1,1-DCE, 1,2-DCA, vinyl chloride, benzene, chloromethane, chloroform and 1,4-dioxane. The monitoring wells sampled at least once in 2004 include NW2D, NW2S, EM3D, EM4S, EM8D, EM8S, EM9M, EM9S, EM10S, EM20D, EM22D, EM24D and EM37S.

Laboratory analysis detected at least one of the target VOCs in a sample collected from 10 of the 13 monitoring wells sampled in 2004 (Table 2). One or more of the samples collected from wells NW2D, EM3D, EM4S, EM8D, EM8S, EM9S, EM9M, EM22D,

EM24D and EM37S contained a VOC in a concentration above the criteria set in the ROD. The highest concentrations were generally detected at EM8S, which is located on the EM site and immediately downgradient of PW-1. The VOC concentrations detected in EM8D were significantly lower than the concentrations detected at EM8S. Monitoring wells EM22D and NW2D are located off-site to the east or downgradient of the EM site and they also contained VOC concentrations in excess of the criteria set in the ROD.

Monitoring wells EM8S and EM8D are generally located hydraulically downgradient of PW-1 and PW-3 and the presumed source area beneath the adjacent building (Figure 3). Monitoring well EM8S has historically contained the highest PCE and TCE concentrations. The PCE concentration has fluctuated from the mid-1990's through 2001, although the concentration appeared to be decreasing. Since 2001, when the ground water pumpout system was shut down, the PCE and TCE concentrations decreased significantly. However, the cis-1, 2-DCE concentration increased significantly in early 2004 and decreased in the October 2004 sample to a concentration closer to historical levels (Figure 7). The VOC concentrations at EM8D have decreased since the late 1980's (Figure 8), although TCE was detected at 10 µg/l in the October 2004 sample (Table 1).

The PCE and TCE concentrations at off-site well, EM22D, have also decreased from the mid-1980's through 2004. However, the PCE and TCE have increased in the October 2004 sample and the cis-1, 2-DCE concentration has generally been increasing since the ground water pumpout system was shut down (Table 1 and Figure 9).

Monitoring well, NW2D, is the furthest downgradient well and the closest monitoring well to the City well field to be sampled in 2004. Laboratory analysis detected 31 µg/l of TCE and 79 µg/l of PCE in the sample collected in October 2004 (Table 1). These concentrations exceed the ground water criteria set in the ROD. Monitoring well NW2D has not been routinely sampled thus an evaluation of the historical trends has not been performed.

Monitoring wells EM3D and EM24D are located along the east-central and northeast corner of the EM site, respectively. The TCE concentration was generally decreasing at both wells since the ground water pumpout system was shut down in 2001. However, the TCE concentration increased at both wells in the October 2004 sample.

The monitoring well network has changed over the years as wells have been abandoned. Monitoring wells EM1S, EM2S, EM22S, EM38S, EM38D, EM39S, EM39D and PW-2 were abandoned in 1998. Additional monitoring wells may have been abandoned since 1998, although the available information is unclear. Further documentation of the abandoned wells and the remaining wells is needed.

Since the last Five Year Review, Grede Foundries, Inc., current owners of the former EM building, added an approximately 1.2 acre addition to the south side of the building, west of the thermoplastics wing.

BN Car Shop

The physical condition of the containment cell, the fence and the monitoring wells are checked quarterly and the vegetative cover is mowed annually. Ground water sampling and analysis is performed annually at the four monitoring wells and quarterly at the sump. The lysimeter is checked quarterly for the presence of leachate.

Leachate is pumped from the sump on a quarterly basis and transported to St. Paul for disposal based on a permit (permit no. 2220) from the Metropolitan Council Environmental Services (MCES). Quarterly discharge reports are submitted to MCES and the permit is valid through August 31, 2005. The reports indicate the volume of leachate began increasing in 2001 and was 7,700 gallons in 2002 and 8,500 gallons in 2003.

The target VOCs, PAHs and PCBs were not detected in the annual ground water sample collected from the four monitoring wells in 2002 and 2003. In July 2002, arsenic was detected in the ground water sample collected from NW-3S and cadmium was detected in the sample from MW-28 and MW-34. Arsenic, cadmium and lead were not detected in the samples collected from the four monitoring wells in 2003, although, the reporting limits were elevated.

PCBs were not detected in the quarterly samples collected from the sump in 2002 and 2003. Laboratory analysis detected acenaphthene, 2-methylnaphthalene and naphthalene in one of the quarterly samples collected from the sump in 2002. The target PAHs were not detected in the quarterly samples collected from the sump in 2003. Several VOCs were detected in the quarterly sump samples collected in 2002 and 2003, including cis-1, 2-DCE, TCE and PCE.

BN has deeded portions of the original BN site to the City of Waite Park. The City has sold portions of the property to other parties, with portions of the property developed as the West River Business Park. BN currently owns 44 acres located on the eastern half of the site (Figure 10).

The Explanation of Significant Differences allowed an Interim Remedy to address the lead impacted soil on the BN site. Several iterations of assessment and response actions were performed since 1998. The assessment and response actions are summarized as follows:

- BN excavated approximately 105,000 tons of lead-contaminated soil from Areas A, B and C which was stockpiled on-site. Between May and August 1999, the stockpiled soil was stabilized on-site using EnviroBlend, a commercial stabilizing product, and transported to the Superior FCR Landfill located in Buffalo, Minnesota for disposal.

- Approximately 60 acres of the BN site remained to be investigated on all or parts of Area B, C, D, E, F, G and H. The additional investigation to delineate the lead impacted areas was completed in 2000. The assessment also detected several areas with elevated arsenic concentrations. The arsenic-impacted areas coincided with lead-impacted areas.
- The additional assessment included the adjacent Park Press property, located at 355 6th Avenue North, which is part of the BN site. The assessment detected lead, cadmium, and arsenic concentrations which are below the cleanup levels established for the BN Car Shop Site. The MPCA stated in an April 10, 2002 letter that “no further remedial action is required at this property.”
- Response actions were completed on the BN site during September and October 2000 along the northern portion of Areas G and H (Figure 11). The response actions included the excavation, treatment and off-site disposal of lead impacted soil and also included the excavation and off-site disposal of asbestos containing material (ACM) that was discovered intermixed with the lead-impacted soil. An estimated 7,884 cubic yards of impacted soil was excavated, stabilized using EnviroBlend and transported to Superior FCR Landfill for disposal.
- Response actions were completed on the BN site during August through November 2000 and June through August 2001 at Area F and the southern portion of Areas G and H (Figure 11). The response action included the excavation, treatment and off-site disposal of lead impacted soil and also included the excavation and off-site disposal of ACM that was discovered intermixed with the lead-impacted soil. An estimated 24,000 cubic yards of impacted soil was excavated, stabilized using EnviroBlend and transported to Superior FCR Landfill for disposal.
- Approximately 17,400 tons of lead-impacted soil was excavated from Lots 1, 2 and 3 of Block 2 in the West River Business Park in 2000 (Figure 11). Based on the analytical data, these soils did not require treatment prior to disposal at the Elk River Landfill in Elk River, Minnesota.
- Contaminated soil was excavated in 2001 from the BN property in Areas F, G and H; from the West River Business Park Partnership, L.L.P. property in Lots 2, 3, 4 and 5 of Block 1 located in Area B; and from the Waite Park Manufacturing, Inc. property located in Areas B and D (Figure 11). The response action also included the excavation and off-site disposal of ACM that was discovered intermixed with the lead-impacted soil at select areas of the site. A total of 31,968 tons of impacted soil was stabilized using EnviroBlend and transported to Superior FCR Landfill for disposal.

- On April 30, 2001, an additional 40 cubic yards of lead-impacted soil was excavated from areas MM-60, MM-61 and MM-62 on Lot 2 of Block 2 on the West River Business Park portion of the former BN property.

BN abandoned six monitoring wells and transferred ownership of three monitoring wells to the City in 2002. The abandoned monitoring wells include MPCA14S, ERT25D, MPCA4D, MPCA11D, Railroad well #1 and Railroad well #2. The three wells transferred to the City were MPCA13D, MPCA3D and ERT26D. The only remaining monitoring wells used by BN are MW28, MW33, MW34 and NW3S. These wells are used for monitoring around the containment cell.

The BN site was deleted from the PLP on July 2, 2002, with all RAs completed and with a contingency plan in place for cleanups if additional development occurs.

Institutional Controls Review

Specific sections of the MERLA statutes referenced in the citations in this discussion are included in Appendix G, Minnesota Statutes Regarding Institutional Controls. MERLA (Minn. Stat. § 115B) provides the MPCA with the authority to require or seek agreement to establish institutional controls, including property use restrictions on a property, in Minn. Stat. § 115B.16, subd. 2. Minn. Stat. § 115B.16, subd. 3 provides that the county recorder must record the affidavits presented in a manner which will assure their disclosure in the ordinary course of a title search. Minn. Stat. § 115B.16, subd. 4 provides that any person who knowingly fails to record an affidavit required by subd.2 (b) is liable under Minn. Stat. §§ 115B.04 and 115B.05 for any release or threatened release resulting from the violation.

Minn. Stat. § 115B.16 subd. 1 restricts post closure use of disposal facilities (BN's containment cell). Minn. Rules govern solid waste management facility and hazardous waste management units regarding post-closure care and prohibiting other use of the property.

Minn. Stat. § 115B.17, subd. 15 provides MPCA with authority for the acquisition of interest in property, including easements and restrictive covenants.

Minn. Stat. § 115B.175, subd. 2 authorizes an agreement as a condition for approval of a voluntary response action plan that does not require removal or remedy of all releases and threatened releases. Minn. Stat. § 115B. 175, subd. 6(a) authorizes agreements between the MPCA and responsible persons who undertake cleanups of releases. Minn. Stat. § 115B. 177, subd. 1 provides for an off-site source determination or agreement.

Minn. Stat. §§ 115.03(e) (orders and agreements related to water pollution), 115.071 (orders and agreements under any law enacted for the prevention, control, or abatement of pollution), 116.03, subd. 2 (agreements), and 116.07, subd. 9 (orders and agreements

relating to waste) provide MPCA with broad authority to enter into agreements. The agreement may take the form of consent order, consent decree, access agreement, “no action” agreement, stipulation agreement, or other form. Parties may agree to include conditions for compliance with statute or rule imposing restrictions or disclosure, restrictive covenant, easement allowing MPCA access, or other land use restrictions or requirements.

The overall authority to address long-term maintenance and monitoring, including institutional controls, is provided in Minn. Stat. ch. 115B and the definitions of “remedy or remedial action” and “institutional controls” at Minn. Stat. §§ 115B.02, subds. 16 and 9a, respectively.

Institutional controls, as defined and applied in the MERLA, are not themselves considered remedial or cleanup actions but can be a factor to consider in making a “no further action” decision. The MPCA guidance documents discuss the use of deed notice and deed restrictions along with model legal instruments in a chapter of the 1998 MPCA Risk-Based Guidance entitled “Incorporation of Planned Property Use into Site Decisions” at www.pca.state.mn.us/cleanup/riskbasedoc.html.

The US EPA also provides guidance for institutional controls that should be used at sites where unlimited use and unrestricted exposure (UU/UE) is not achieved, at <http://www.epa.gov/superfund/action/ic/guide/index.htm>

Waite Park Wells

The City has prepared and is implementing a Wellhead Protection Plan. Wellhead protection is a means of protecting public water supply wells by preventing contaminants from entering the area that contributes water to the well or well field over a period of time. The wellhead protection area is determined by using geologic and hydrologic criteria, such as the physical characteristics of the aquifer and the effects which pumping has on the rate and direction of groundwater movement. A management plan is developed for the wellhead protection area that includes inventorying potential sources of groundwater contamination, monitoring for the presence of specific contaminants, and managing existing and future land and water uses that pose a threat to groundwater quality. The contamination from the EM Site and potential contamination from the BN site is addressed by the Wellhead Protection Plan.

In addition, the City has an ordinance which requires use of municipal water by all but single family homes. This ordinance would apply to the EM and BN sites and any area overlying the plume, which are all zoned commercial. The City does not have an ordinance which prohibits the installation of a well.

Electric Machinery

Pursuant to the ROD requirement that a deed notice be placed on the EM site property under Ch. 115B.16, Subd.2 of MERLA, the owner signed an Affidavit on December 14, 1989 and recorded it at the County Recorder's Office.

The extent of the soil excavation performed in 1999 along the southwest portion of the EM site was based on visual observations, thus, the residual contaminant concentration in the EM soil is unknown. The extent and magnitude of the soil contamination remaining beneath the existing building and additions, especially in the vicinity of the sump at the paint booth, is unknown. The most recent ground water analytical data indicates there are contaminant concentrations in excess of the cleanup criteria at the EM site. The contaminant concentrations in the soil and the contaminant concentrations remaining in ground water do not allow for UU/UE. The EM RPs should submit and implement an IC Plan (including the IC Monitoring Plan), for the EM site and for the properties over the plume, that meets the requirements to be developed by MPCA; document existing ICs; and assure that all ICs appear within the chain of title. The MPCA is recommending the implementation of an additional institutional control, an easement and declaration of restrictive covenant pursuant to CH. 115B.17 of MERLA. The long-term protectiveness of the remedy at the EM site depends on implementation of a minimum of the following restrictions as applicable that prohibit: a) disturbance of soil at the EM site property unless pursuant to a work plan approved by the MPCA Commissioner; b) well drilling and use of ground water in the plume until cleanup levels are achieved; c) inappropriate uses of the EM site land including residential use where soils exceed the residential standard or UU/UE.

BN Car Shop

Pursuant to Ch. 115B.16, Subd. 2 of MERLA, an Affidavit for the BN property was signed on July 21, 1986 and filed at the County Recorder's Office.

The ROD and the ESD stated that restrictions would be placed on any area that is not remediated to unrestricted land use remediation levels and on the property containing the containment facility. At least on most of the BN site, the contaminant concentrations in the soil and the contaminant concentrations remaining in ground water, although apparently attenuating, do not allow UU/UE. The area east of 10th Avenue North to the Sauk River has been remediated to a depth of 4 feet for recreational use. Portions of the BN site have been remediated to industrial use levels. An Easement and Declaration of Restrictions and Covenants, which limits the use of the property and the ground water, has been placed by the City on the parts of the BN site that the City owns. Several draft declaration of covenants and restrictions/grant of easement documents have been prepared for additional portions of the BN site and are being reviewed by the MPCA. The long-term protectiveness of the remedy at the BN site depends on implementation of a minimum of the following land and ground water restrictions as applicable that prohibit:

a) interference with or disturbance of the cap and contaminated soils located within the containment cell; b) disturbance of subsurface soils at the BN site properties in areas

where contaminated soils may exceed industrial cleanup levels; c) well drilling and use of ground water until cleanup levels are achieved; d) residential use of land where soils may exceed the residential level or UU/UE, including Area A where the only allowed uses are public park or industrial/commercial; and e) any use of land other than industrial/commercial on Areas B-H. BN should submit and implement an IC Plan (including the IC Monitoring Plan), for the BN site that meets the requirements to be developed by MPCA; assure that all ICs appear within the chain of title; document existing ICs; provide maps documenting the locations and associated ICs; and complete and record the remaining IC easements/ declarations of restrictions and covenants.

Institutional Controls Documents

The following is a chronological list of existing legal institutional controls and related documents which are included in their entirety in Attachment F.

Affidavit of Thomas J. Patnode, Environmental Engineer for BN, July 21, 1986, filed August 22, 1986, as Doc. No. 602757, describes actual and potential contamination on the BN property pursuant to MERLA.

Quit Claim Deed, August 20, 1986, filed August 22, 1986 as Doc. No. 0602758, from BN to Waite Park, conveys 126.4 acres from the center of the Sauk River east to the railroad SW/ NE right of way, indemnifies City for any and all cleanup costs for contaminants on the property.

Affidavit, December 28, 1989, notarized December 14, 1989, filed January 3, 1990 as Doc. No. 0669550, Johann Wagner, describes actual and potential contamination on EM property pursuant to MERLA.

Warranty Deed, December 14, 1989, filed January 3, 1990 as Doc. No. 0669547, from ABB to M E International, conveyed the EM site property (est. 45 acres), missing page 3 that was filed as Exhibit B Exceptions which by inference elsewhere contained reference to the Affidavit of Johann Wagner.

Access Agreement, December 28, 1989, filed January 3, 1990 as Doc. No. 0669548, between M E International by John Oertel and ABB Power Distribution, Inc. by Johann Wagner, give MPCA and ABB access; successive interests in the property subject to Access Agreement until agreement is terminated.

Warranty Deed, September 13, 1995, filed September 20, 1995 as Doc. No. 803663, from M E International, Inc. to Grede-St. Cloud, Inc., Tract II Lots 3 & 4 Foundry Addition; subject to Access Agreement between M E International and ABB, and Affidavit by Johann Wagner.

Quit Claim Deed, March 20, 1997, filed June 26, 1997 as Doc. No. 848214, conveyed about 1.5 acres real property from Waite Park to BN subject to rights reserved to BN in

Quit Claim Deed dated August 20, 1986, as Doc No. 602758, and subject to Affidavit of Thomas J. Patnode. filed August 22, 1986, as Doc. No. 602757; the north part of the containment cell is located on this property since it is referred to in the Affidavit of Richard Miller having the same legal description.

Affidavit of Richard Miller, Mayor of Waite Park, March 20, 1997, filed June 26, 1997 as Doc. No. 848215, describes soil contaminants for the containment cell on the property.

Easement and Declaration of Restrictions and Covenants, May 6, 1997, filed May 16, 1997 as Doc. No. 845329 (23 pages), Richard Miller, Mayor of Waite Park, discloses previous contamination pursuant to MERLA on Exhibit 1 West River Business Park Block 1 Lots 1-7 and Block 2 Lots 1-3; cleanup status and cleanup levels in Exhibit 2; use restrictions limited to commercial and industrial; no extraction of ground water or excavation below ground water table; soils use restrictions for soils from Area 1 (all portions not contained in Areas 2 and 3), Area 2 (Exhibits 3 and 4, approx. Block 1 Lots 1 and 2 and Block 2 Lot 1), and Area 3 (Exhibits 4 and 4a, area near Test Trench 3, approx. Block 1, Lot 1); covenant not to violate restrictions; MPCA right of entry; terms for modification; runs with property; accepted by MPCA on May 12, 1997.

Easement, June 11, 1997, filed June 26, 1997 as Doc. No. 848216, from BN to Waite Park, for a roadway and utility easement, subject to all existing interests, in the S ½ of the SE ¼ S8 T124 R 28, apparently for the road on the east and north of the containment cell.

Affidavit Concerning Real Property Contaminated with Hazardous Substances, May 1, 2001, (recording status unknown), Ronald Morton, Managing Partner, West River Business Park Partnership, L.L.P., discloses previous contamination pursuant to MERLA on Lots 6 and 7, Block 1, West River Business Park Addition; previous ownership by BN; BN sale to Waite Park; purchase of property from Waite Park in May, 1996; VIC cleanup to depths of 4 feet, 4 feet 9 inches, and 2 feet 9 inches, with remaining contamination along a utility line on west line of Lot 6; and cleanup status; requirement to contact MPCA prior to activity which may affect the protectiveness or disturb the property; and notice of use restrictions limited to commercial or industrial purpose (Exhibit A missing).

Affidavit Concerning Real Property Contaminated with Hazardous Substances, Ronald Morton, General Partner, West River Business Park Partnership, L.L.P. and Westland Properties, Inc., October 16, 2001, (recording status is unknown), discloses previous contamination pursuant to MERLA on Lots 2, 3, 4, and 5 Block 1 and Lots 1, 2 and 3 Block 2, West River Business Park Addition; previous ownership by BN; BN sale to Waite Park; purchase of property from Waite Park in May, 1996; VIC cleanup; and cleanup status; requirement to contact MPCA prior to activity which may affect the protectiveness or disturb the property; and notice of use restrictions limited to commercial or industrial.

Affidavit Concerning Real Property Contaminated with Hazardous Substances, Ronald Morton, General Partner, West River Business Park Partnership, L.L.P., November 16, 2001, (recording status is unknown), discloses previous contamination pursuant to MERLA on Lot 7 Block 1, West River Business Park Addition; previous ownership by BN; BN sale to Waite Park; purchase of property from Waite Park in May, 1996; VIC cleanup; and cleanup status; requirement to contact MPCA prior to activity which may affect the protectiveness or disturb the property; and notice of use restrictions limited to commercial, industrial, and charter school and handicapped rehabilitation facility with no outdoor facilities.

Modification of Easement and Declaration of Restrictions and Covenants, Ron Morton, Managing Partner, West River Business Park Partnership, L.L.P., December 21, 2001, filed as Doc. No. 996097, declares Lot 7 Block 1 West River Business Park Addition is subject to an Easement and Declaration of Restrictions and Covenants granted by Waite Park on May 6, 1997, and recorded as Doc. No. 845329; with Exhibit A (an Affidavit by Ron Morton dated December 14, 2001, proposing use by a charter school, VIC cleanup to 4 feet, related to Affidavit dated May 1, 2001); modifying the use restriction to allow use by a charter school; accepted by MPCA on January 7, 2002.

Site Visit

A site visit was conducted on November 3, 2004 as part of the Five-Year Review process. In attendance were representatives for EM, BN, the City of Waite Park, and the MPCA. A copy of the site inspection form for the three sites and select photographs taken during the site visit are presented in Appendix E.

Waite Park Wells

A visual review of the municipal wells and the former and current treatment buildings was completed for the Waite Park Wells site. Municipal wells 1, 3, 4 and 5 are each located in a separate pumphouse and appear to be operational. The new treatment building was operational. The former treatment building is still located on the property but it is no longer operational. The municipal wells and the treatment buildings are located within a fenced area with a locked gate. There also is a security alarm system for each well pumphouse and the new treatment building.

Electric Machinery

The EM site visit included a visual review of the monitoring and pumping wells, the ground water treatment equipment, and the remaining SVE equipment. The site is fenced with signage. Several of the monitoring wells were not located, although some of the wells have been abandoned since 1998. There also were several unidentified pipes sticking out of the ground. Pumpout wells PW-1 and PW-3 are located south of the building, along the eastern portion of the property. The blower for the SVE system is still located at EM9S. The ground water treatment building is located along the south-central

property line. The drainage sump was observed along the southwest corner of the property.

BN Car Shop

The BN site visit included a walk-through of the containment cell, a review of the monitoring well locations and a visual review of the remainder of the BN property. The containment cell is fenced with two locked access gates. There was only one sign observed along the exterior of the fence. The fence along the southeast corner of the containment cell appeared to be damaged, possibly from snow plowing. There also appeared to be a gap of up to 1½ feet between the base of the fence and the rip-rap at the two stormwater drainage areas located along the north side of the containment cell. The gap is large enough to allow someone to crawl under the fence. The damage to the fence and the two gaps need to be fixed to maintain the integrity of the fence and to limit access. The sign for the containment cell is outdated since the phone number provided lists the incorrect area code for the MPCA.

There is a sump and a lysimeter located along the west-central portion of the containment cell. The covers for the sump and the lysimeter were not locked, although they are located inside the fence. The cover on the lysimeter would not close completely.

Three passive PVC vent pipes were observed along the top of the containment cell. A black pipe was located along the middle of the eastern sidewall of the containment cell which appeared to slope inward instead of draining outward. The purpose of the pipe needs to be determined.

The surface of the containment cell appeared to have a good vegetative cover which appeared to be mowed periodically. There were no obvious signs of cracks, holes or erosion. The drainage areas were covered by rip-rap or vegetation and appeared to be draining stormwater off of the containment cell.

Along the southeast corner of the containment cell is a buried, steel trough which proceeds from the adjacent building under the fence into the containment cell. A pipe emerged from the second floor window down the wall of the building and appeared to discharge to the buried trough. This may be a roof drain for the adjacent building, although this was not confirmed. The vegetation in this area was different than the surrounding vegetation. The reason for the buried trough and the change in the vegetation should be determined.

The four monitoring wells were located. The wells all had a locking cap. One of the wells along the north side of the containment cell needs a label as required by MDH.

Development of some of the vacant property located just west of Great Oak Drive was observed. The development appeared to consist of the construction of access drives and preparation of the site for possible building construction.

Local Interviews

Interviews were conducted with various parties associated with the sites.

Mr. Brian Noma, Public Health Engineer with MDH and Mr. Rich Soule, Staff Hydrogeologist with MDH were interviewed on December 2, 2004. Mr. Noma indicated he was the engineer who reviewed and approved the plans for the new municipal well and treatment building for the City. Mr. Soule had some involvement in reviewing the wellhead protection plan prepared by the City.

Ms. Elaine Hammick, Senior Environmental Engineer with ABB Business Services, Inc. (ABB) was interviewed on December 3, 2004. ABB is one of the responsible parties for the EM site. Ms. Hammick stated that, with the information provided at the December 3, 2004 meeting, the remedy appears to be functioning as intended. She also indicated the willingness of ABB to cooperate with the requirement for implementation of the ICs.

Mr. Berhane Worku, MCES Engineer was contacted on December 6, 2004 regarding the status of the discharge permit for the leachate from the containment cell on the BN site. Mr. Worku stated that BN has been submitting the reports quarterly and there are no outstanding issues regarding compliance with the permit.

Mr. Bill Schluez, City Director of Public Works, was interviewed on December 6, 2004. He indicated the ground water treatment system was performing as intended, although he did express a concern regarding the ongoing treatment costs incurred by the City.

Mr. Greg Jeffries, Manager of Environmental Remediation with the Burlington Northern and Santa Fe Railway Company, was interviewed on December 13, 2004. He stated that BNSF has completed the remedial actions as required by the ROD and the ESD and they are anticipating proceeding towards project closure. Mr. Jeffries indicated at the site inspection that he would try to locate the MERLA affidavit for the BN site.

Mr. Nelson Olavarria, Senior Project Manager with Cooper Industries, Inc., was interviewed on December 13, 2004. He stated the remedy has performed as intended and they assume the project is proceeding towards closure.

VII. TECHNICAL ASSESSMENT

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents, ARARs and TBCS, risk assumptions, and results of the site inspection indicates the remedies at the Waite Park Wells, EM and BN sites are functioning as intended by the RODs as modified by the BN ESD, except for:

1. The performance standards for the cleanup of the aquifer at the EM site are not being met;
 2. Continuing elevated levels of VOCs in the shallow aquifer at the EM site suggest source areas are not controlled;
 3. The inaccessibility of current risk assumptions (discussed in Question B);
 4. The lack of information on indoor vapor intrusion (discussed in Question C);
- and
5. The implementation of remaining institutional controls.

Waite Park Wells

The City continues to pump ground water from the municipal wells located in the wellfield and treat the water using an aeration tower prior to discharge for human consumption. The City monitors and reports to the MDH periodically. The target VOC concentrations have fluctuated in the influent ground water samples collected from the City wells, although laboratory analysis did not detect the target VOCs in the samples collected during January, May and August 2004. The water supply treatment RA remains implemented with the construction of the new plant. The RA is effective and protective, because monitoring indicates the treated drinking water concentrations remain below the applicable drinking water criteria, and because the increased water usage from City growth and installation of the higher capacity City Well 5 are factors that help to keep the ground water plume contained. The wells and treatment plant have a high level of security with fence and locking systems. The zoning of the EM site, the BN site, and the immediate area upgradient of the wellfield is commercial, and businesses are required by ordinance to use municipal water, although there is no specific ordinance to prevent installation of a well. The City is implementing a wellhead protection plan approved by the MDH. The design and maintenance plan for the new treatment system has allowed for improved control of iron that would otherwise interfere with the operation of the plant.

Electric Machinery

The remedy implemented at the EM site consisted of ground water removal, treatment and discharge. Ground water pumping was performed for over ten years from the shallow aquifer before it was discontinued in April 2001 as part of a test shut down. The discharge had reached asymptotic levels of VOCs, although the concentrations of a few VOC compounds were still over their MCLs. Pumping well PW-1 and the Soil Vapor

Extraction System, as currently configured, have reached points of diminishing returns. The effectiveness of these response actions, in their current capacity and design (without current technology), is limited. Removal efficiency and cost-effectiveness are concerns. EM site RPs and the MPCA staff are currently evaluating the effectiveness of the test shut down.

Ground water quality and the plume configuration in relation to the downgradient City wells are currently being evaluated by review of ground water elevation monitoring and ground water sampling and analysis at select monitoring wells. The VOC concentrations continue to fluctuate at the monitoring wells and some contaminant concentrations remain above the MCLs, although the VOC concentrations are generally lower than the historical high concentrations. The reasons for a VOC increase in EM8S after the pumpout shutdown are uncertain, but may be attributed to: the higher capacity pumping of municipal well 5, municipal wells pumping management, water table shifts mobilizing source material, or other causes. EM8S is downgradient of PW1 and one of the known sources. Several years of monitoring are needed to assure that there will be no more serious contamination surges.

While the EM pumping system has apparently been effective at reducing impacts to the municipal wells, it appears that the system, as designed, was limited in achieving the goal of bringing contaminant concentrations in the water supply aquifer to levels below the site cleanup goals. The following observations have been made regarding the increasing concentrations after the test pumpout shutdown at the EM site:

1. Municipal well #5 was brought on line with a large pumping capacity;
2. The City has a varied pumping regime for the four municipal wells;
3. The timing of the increase in monitoring well concentrations coincided with the shut down of the vapor extraction system and the pumping wells. This contamination is moving toward City wells;
4. Precipitation events with water table shifts;
5. Despite apparent containment, upon pumping shutdown, rebound of PCE has been observed at other sites;
6. The increased cis-1,2-dichloroethylene concentrations in well MW 8s and MW 22D may indicate dechlorination is occurring.

While the cause for declining VOC levels in the city wells could be the shutdown or a combination of other potential factors which may hinder or push the VOC contamination, potential exists to again see higher VOCs in the intakes of the City wells. The Waite Park water supply is vulnerable due to the lack of low permeability geologic deposits overlying the source water aquifer, resulting in the designation as highly sensitive. The City's Wellhead Protection Plan describes actions to protect the aquifer from other contamination sources, and specifically advocates continuing remedial measures at EM and BN to protect and restore the aquifer that is the City's only water supply. Although the treatment plant is capable of treating the increased concentrations, the continuing contamination requires longer term operation of the plant. Options for action include but are not limited to:

1. Restarting the EM pumpout system should be given careful consideration to provide some measure of protection for the city wells and treatment plan.
2. Evaluate natural attenuation to determine if the attenuation will effectively prevent contaminants from getting to the municipal well.
3. Make modifications to the EM pumping system (vacuum enhance the pumping well) to increase the efficiency of the system.

The contaminant concentrations remaining in the ground water plume do not allow for UU/UE. The contaminant concentrations remaining in the soil may not allow for UU/UE. EM RPs should submit and implement an IC Plan (including the IC Monitoring Plan), for the EM site and for the properties over the plume, that meets the requirements to be developed by MPCA; assure that all ICs appear within the chain of title; document existing ICs; complete and record the IC easement/declaration of restrictions and covenants for a minimum of the following land and ground water restrictions as applicable that prohibit: a) disturbance of soil at the EM site property unless pursuant to a work plan approved by the MPCA Commissioner; b) well drilling and use of ground water in the plume until cleanup levels are achieved; c) inappropriate uses of the EM site land including residential use where soils exceed the residential standard or UU/UE. Access at the EM site is restricted with a well-kept fence with signs. The lack of a restrictive covenant at the EM site is not affecting current protectiveness at the site, but could affect future protectiveness.

Burlington Northern Car Shop

Implementation of the remedy at the BN site included 1) excavation, solidification/stabilization and placement of impacted soil from OU1 and OU2 into an on-site containment cell in 1994-1995, 2) ground water monitoring, and 3) placement of a deed notification on the site and restrictions on some areas that were not remediated to unrestricted land use remediation levels and on property containing the containment facility. The 1998 ESD Integrated Remedy provided that an evaluation of areas not excavated may determine whether contamination may remain in place as a part of a remedial action, with the use of engineering and institutional controls to ensure that the remedy remains protective of public health and the environment. Additional soil was excavated at several areas across the BN site including the West River Business Park and disposed of off-site as addressed by the ESD and proposed integrated remedies. Performance standards have not changed. The RAs are protective.

At the BN containment cell, leachate removal from the collection system and ground water monitoring around the cell is ongoing. Ground water monitoring at other areas of the BN site has been discontinued and the monitoring wells were abandoned as approved by MPCA staff.

The five-year review inspection found areas of the fence around the cell which could allow unauthorized access, which BN will fix. Other areas of the BN site have been

remediated to allow unrestricted access for the surface soils. Continuing the good maintenance of the cap will maintain the effectiveness of the cell RA.

The remedy is performing as intended; however, remaining institutional controls are needed because portions of the site were not remediated to unrestricted use levels. The ROD required restrictions for the portion of the property with the containment cell. BN and MPCA are evaluating the status of the investigation and remedial actions completed to date and are discussing the remaining appropriate institutional controls needed. BN should submit and implement an IC Plan (including the IC Monitoring Plan), for the BN site that meets the requirements to be developed by MPCA; assure that all ICs appear within the chain of title; document existing ICs; provide maps documenting the locations and associated ICs; and complete and record the remaining IC easements/ declarations of restrictions and covenants for a minimum of the following land and ground water restrictions as applicable that prohibit: a) interference with or disturbance of the cap and contaminated soils located within the containment cell; b) disturbance of subsurface soils at the BN site properties in areas where contaminated soils may exceed industrial cleanup levels; c) well drilling and use of ground water until cleanup levels are achieved; d) residential use of land where soils may exceed the residential level or UU/UE, including Area A where the only allowed uses are public park or industrial/commercial; and e) any use of land other than industrial/commercial on Areas B-H.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

The exposure assumptions and toxicity data used at the time of the remedy selection are valid for the Waite Park Wells, EM and BN sites, although the information for PCE and TCE has been removed from the EPA's Integrated Risk Information System (IRIS) in anticipation of new risk assessments. The ARARs and the TBCs established at the time of the remedy selection are still valid and were discussed in the two previous five-year reviews. The ground water cleanup levels at the EM site are still valid but the RAs are facing issues of efficiency and cost-effectiveness. New information about some of the ARARs and TBCs is shown in the Table below. The Remedial Action Objectives are still valid. No new exposure pathways have been identified.

RALs were cited in the EM ROD as possible ground water cleanup levels that were established where no MCL existed. The EM ROD and current ground water cleanup criteria are presented in the table below.

Table of EM Site Ground Water Cleanup Criteria and Target Cleanup Levels

Compound	MCL ($\mu\text{g/l}$) ROD/2004	RAL ($\mu\text{g/l}$) ROD/2004	HRL ($\mu\text{g/l}$) 2004	Target Cleanup Level ($\mu\text{g/l}$) ROD
Tetrachloroethene (PCE), up to 34,000 $\mu\text{g/l}$ in shallow, 600 $\mu\text{g/l}$ in deep	- / 5	6.6 / HRL	7	6.6 (RAL) (6.7 in text)
Trichloroethene (TCE), up to 5,100 $\mu\text{g/l}$	5 / 5	31 / 5*	30 *	5 (MCL)
1,1,1-Trichloroethane (1,1,1-TCA), to 1,300 $\mu\text{g/l}$	200 / 200	200 / HRL	600	200 (MCL)
1,2-Dichloroethene (1,2-DCE), up to 4,000 $\mu\text{g/l}$	- / -	70/ isomers	-	70 (RAL)
Cis-1,2-Dichloroethene (cis-1,2,-DCE)**	- / 70	- /HRL	70	-
Trans-1,2-Dichloroethene (trans-1,2-DCE)**	- / 100	- /HRL	100	-
1,1-Dichloroethane (1,1-DCA), up to 380 $\mu\text{g/l}$	- / -	810 / HRL	70	810 (RAL)
<p>*The HRL is 30 $\mu\text{g/l}$; however, MDH established an interim recommended exposure limit of 5 $\mu\text{g/l}$ in 2002.</p> <p>** MCL and HRL were established after the ROD, new HRLs anticipated.</p>				

Most MDH RALs have now been replaced by promulgated HRLs. Since the RODs were finalized, an MCL of 5 $\mu\text{g/l}$ has been established for PCE. The risk associated with the EM Target Cleanup Level of 6.6 $\mu\text{g/l}$ for PCE is currently in the risk range of 10-4 to 10-6 based on current assumptions. The EPA also established separate MCLs for cis-1,2-DCE (70 $\mu\text{g/l}$) and trans-1,2-DCE (100 $\mu\text{g/l}$) which the MDH established as HRLs in 1994. The cis-1,2-DCE has a non-cancer cardiovascular/blood toxic endpoint; both have the non-cancer liver toxic endpoint. The MDH has established a HRL for 1,1-DCA of 70 $\mu\text{g/l}$, however, the cleanup level for 1,1-DCA of 810 $\mu\text{g/l}$ represents a non-cancer HI of 1 and therefore is still protective.

For carcinogens or possible carcinogens, EPA sets non-enforceable MCLGs (maximum contaminant level goal) at zero. As this goal is often not attainable, the MCL (maximum contaminant level) is set as close to the MCLG as possible given available treatment technology, cost and other factors. In the case of TCE and PCE, the MCLs were set at 5 $\mu\text{g/L}$ because it is relatively easy and cost-effective to attain this level. As both TCE and

PCE are currently under review by EPA, it would be difficult to ascribe the level of risk associated with these exposure levels. The past risk assessments for PCE and TCE have been removed from IRIS (EPA's database of human health effects that may result from exposure to various substances found in the environment). The new risk assessments are still in preparation; the information needed to estimate the risk level of the RODs' cleanup numbers will not be available until EPA completes the PCE and TCE risk assessments.

The EPA prepared a draft risk assessment for TCE in 2001. EPA's Science Advisory Board (SAB) reviewed the risk assessment and provided comments in 2002, and EPA revised the risk assessment and submitted it to the National Academies of Science (NAS) for review in 2004. The NAS anticipates completion of the review in February 2006 and EPA anticipates finalization of the risk assessment in August 2007. Upon review of the draft risk assessment for TCE and considering the review process at the federal level, the MDH established an HBV of 5 $\mu\text{g/L}$ as an "appropriate exposure limit for TCE in drinking water" in the interim until the risk assessment for TCE has been finalized.

The EPA is currently reviewing the risk assessment for PCE and does not anticipate finalizing the assessment until early 2006. The MDH is in the process of reviewing the HRL for PCE and anticipates finalization of the HRLs in mid-2005.

The EM ROD discusses exposure to contaminant mixtures and states that receptors drinking the untreated water were at minimal risk for effects other than cancer from ingestion of PCE, TCE and 1,1-DCE, *although the risks from ingestion of the mixture is unknown*. Currently, to assess potential risk due to co-contamination (mixtures) of a medium with chemicals which have the same toxicological endpoint and for which data *on the specific mixture is lacking, the EPA recommends adding the toxicities*. To estimate the potential risk due to multiple contaminants in one source (i.e. groundwater), the additive model calculates a hazard index for the mixture. When EPA completes its risk assessment for TCE and PCE, a risk review will be performed for the mixtures of chemicals in the EM groundwater.

The MDH may also revise or add HRLs, HBVs or RALs in the future. Similarly, the federal MCLs continue to be promulgated or revised as necessary. In addition, the dechlorination occurring at the EM site may result in contaminants which exceed MCLs, HRLs, or HBVs but which do not have established Target Cleanup Levels. When the rule for revised and additional HRLs is promulgated in 2005, sample results, not only for the specific compounds listed in the EM ROD but also for all detected contaminants, from both the municipal wells and EM wells, should be screened against existing ARARs and TBCs that may affect future protectiveness evaluations. If the estimated risk has increased, a determination should be made whether the new estimated risk is acceptable, i.e. within the range of 10^{-4} to 10^{-6} for carcinogenic risk and the hazard index is below 1 for non-carcinogenic effects. If the estimated risk is not within the range, further evaluation of cleanup goals or additional remedial action will be needed.

Land Use

Ownership has changed but not land use for the EM site. Ground water pumping from the deeper aquifer on the EM site was not performed because it was not deemed necessary. Pumping from the shallow aquifer was discontinued in April 2001 as part of a test shut down because the ground water concentrations appeared to attain asymptotic levels. EM site RPs and the MPCA are evaluating the effectiveness of the test shut down. The current conditions and cleanup levels do not allow for UU/UE. A deed notice was placed on the property, but restrictions on the property use also need to be implemented through institutional controls.

Interim Response Actions have been conducted on the BN site over time since the MPCA RFRA in 1985 through the ROD in 1994 to assure the site remained protective in the short-term. The August 11, 1998, Explanation of Significant Differences selected an Interim Remedy to address the lead impacted soil on the BN site. The procedures and protocol established in the ESD have been used to complete subsequent soil remedial actions on the BN site as ownership and land use changed for portions of the BN site. BN transferred ownership of 126 acres to the City. The City retained land in the west for a park, in the wellfield area for water supply expansion and a new treatment plant, and on the south for green space. Much of the rest has been sold for redevelopment, with BN conducting additional cleanups as the property was redeveloped. The area west of 10th Avenue N. to the Sauk River was cleaned up for recreational use as a park. East of 10th Avenue North, the West River Business Park was developed primarily for commercial businesses. Several other businesses were established earlier to the east of the location of the current West River Business Park. Several acres of BN and City land were used for the containment cell. Properties included in the West River Business Park are covered by an Affidavit Concerning Real Property Contaminated with Hazardous Substances and an Easement and Declaration of Restrictions and Covenants. These agreements contain notification requirements and limit property uses. Draft restrictions have been prepared for additional portions of the BN site and are being reviewed by the MPCA. The MPCA staff is also correlating other documents to assure institutional controls exist and are adequate for each area.

To assure future protectiveness at the sites, new development must occur in compliance with approved response actions and use restrictions. The MPCA will require an IC plan that addresses requirements to be developed for the EM and BN sites.

Question C: Has any other information come to light that could question the protectiveness of the remedy?

With approval of MDH, the City installed a fifth municipal well near the other municipal wells, which has a higher pumping capacity than the other municipal wells. Municipal Well 5 is also located in closer proximity to the EM site than the other municipal wells. Further evaluation is needed to determine the effect of municipal well 5 on the stability of

the remaining contaminants in the ground water at the EM and BN sites.

Vapor intrusion has not been directly addressed for all on- and off-site buildings over the source areas and plume, including the EM building, several EM building additions over time, and several business buildings east and downgradient of the EM site. Data from the fall 1999 investigation identified an area of contamination near the paint booth area of the EM building. The extent of the area of contamination beneath the EM building, and the extent and effectiveness of the SVE system remediation of the contaminated area near Well 8S and under the EM building are unknown. The ground water plume extends beneath neighboring properties and their buildings to the southeast of the source areas. Potential may exist for vapor intrusion into the EM building and buildings over the plume.

VIII. ISSUES

Table of Issues

Issue	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
1. VOCs concentrations at the municipal wells are decreasing and being treated, but contaminant concentrations above the cleanup levels remain in the aquifer.	N	Y
2. While currently protective, the adequacy of the EM ROD's PCE and TCE cleanup numbers cannot be determined until EPA Headquarters completes the PCE and TCE risk assessments.	N	Possibly
3. Residual soil contamination remains on the EM site. Ground water has not yet achieved cleanup levels under the EM site and other properties. The EM site does not support UU/UE. An IC Plan needs to be completed for the EM site to implement land and ground water use restrictions.	N	Y

Issue	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
4. Prior to the test shut down, the ground water remediation system discharge to the air stripper at the EM site had reached asymptotic levels of contamination that are still above the ground water cleanup levels. VOC concentrations in well EM8S, located downgradient from well PW-1, have also remained above the ROD cleanup levels.	N	Y
5. The reasons for a VOCs increase in EM8S after the pumpout shutdown are uncertain, but may include effects of the higher capacity pumping of municipal well 5, municipal wells pumping management, water table shifts mobilizing source material, or other causes. Well 8S is downgradient of PW1 and one of the known sources.	N	y
6. A recent list and map has not been compiled over time showing which EM monitoring wells have been abandoned and which wells remain.	N	Possibly
7. Vapor intrusion has not been directly addressed for all on- and off-site buildings over the source areas and plume, including the EM building, the new EM addition, and several business buildings east and downgradient of the EM site.	Unknown	Possibly
8. Residual soil contamination remains on the BN site. Ground water is still at risk due to the remaining soil contamination on the BN property. The BN site does not support unlimited use and unrestricted exposure. Some ICs restricting land and ground water use have been implemented at the BN site, however, additional ICs and documentation of existing ICs are needed. An IC plan needs to be completed for the entire BN site.	N	Y
9. Some maintenance issues with the fence at the containment cell on the BN site need to be addressed to maintain security.	N	Possibly
10. The reason for the increase in the leachate volume in the collection sump at the BN containment cell is not understood.	N	Possibly

Issue	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
11. Development of property continuing to occur on the Waite Park Wells Site may cause possible changes in use.	N	Possibly

IX. RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Table of Recommendations and Follow-Up Actions

Issue	Recommendations and Follow-Up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
1. VOCs in WPW wells	Continue air stripper treatment and monitoring VOC concentrations at the Waite Park municipal wells prior to treatment, midpoint of treatment and post treatment.	City of Waite Park	MPCA	On-going	No	Y
2. Risk Review	For the EM ground water, conduct the PCE, TCE, and mixtures risk review when EPA Headquarters completes the PCE and TCE risk assessments.	EPA, MPCA	MPCA	Dec. 2007	No	Possibly
3. EM ICs	EM RPs should submit and implement an IC Plan (including the IC Monitoring Plan), for the <i>EM site and for the properties</i> over the plume, that meets the requirements to be developed by MPCA; assure that ICs appear within the chain of title; document existing ICs; complete and record the IC easement/declaration of restrictions and covenants for a minimum of the following land and ground water restrictions as applicable that prohibit: a) disturbance of soil at the EM site property unless pursuant to a work plan approved by the MPCA Commissioner; b) well drilling and use of ground water in the plume until cleanup levels are achieved; c) inappropriate uses of the EM site land including residential use where soils exceed the residential standard or UU/UE.	EM RPs, MPCA	EPA, MPCA	Dec. 2005	N	Y

Issue	Recommendations and Follow-Up Actions	Party Re-sponsible	Over-sight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
4. EM Pump-out shut down	Evaluate effectiveness of the test shut down of the ground water remediation system at the EM site and determine whether to continue with the pumping system shut down or to reinitiate ground water pumping.	EM RPs	MPCA	Dec. 2005	N	Possibly
5. VOCs in EM8S	Continue monitoring and further evaluation of the pumpout effect from the WPW water supply, for a better understanding of reasons for a recent increase at EM8S after the shutdown.	EM RPs, City of Waite Park	MPCA	On-going	N	Possibly
6. EM wells	Determine which monitoring wells have been abandoned, which wells remain, and optimize the monitoring plan at the EM site, continue ground water monitoring. In the annual monitoring reports, make recommendations for changes in the plan based on the new data.	EM RPs	MPCA	June 2005	N	Possibly
7. Vapor Intrusion	Complete a Vapor Intrusion Assessment for indoor air at the EM building and any off-site buildings located over the plume, and take actions appropriate to the results.	EM RPs	MPCA	Dec. 2005	Unknown	Possibly

Issue	Recommendations and Follow-Up Actions	Party Re-spon-sible	Over-sight Agen-cy	Mile-stone Date	Affects Protectiveness (Y/N)	
					Current	Future
8. BN ICs	BN should submit and implement an IC Plan (including the IC Monitoring Plan) for the BN site that meets the requirements to be developed by MPCA; assure that all ICs appear within the chain of title; document existing ICs; provide maps documenting the locations and associated ICs; and complete and record the remaining IC easements/ declarations of restrictions and covenants for a minimum of the following land and ground water restrictions as applicable that prohibit: a) interference with or disturbance of the cap and contaminated soils located within the containment cell; b) disturbance of subsurface soils at the BN site properties in areas where contaminated soils may exceed industrial cleanup levels; c) well drilling and use of ground water until cleanup levels are achieved; d) residential use of land where soils may exceed the residential level or UU/UE, including Area A where the only allowed uses are public park or industrial/commercial; and e) any use of land other than industrial/ commercial on Areas B-H.	BN, MPCA	MPCA	Dec. 2005	N	Y
9. BN cell	Complete repairs to the BN containment cell fence, minimize access under the fence at the stormwater rip-rap areas, continue maintenance.	BN	MPCA	May 2005 On-going	N	Pos-sibly

Issue	Recommendations and Follow-Up Actions	Party Responsible	Over-sight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
10. BN cell leachate	Determine the reason for the increase in leachate volume, continue ground water monitoring at the BN containment cell.	BN	MPCA	Dec. 2005 On-going	N	Possibly
11. Development and use change	Assure that further development occurs in compliance with the approved response actions. The planned EM and BN sites agreements for O&M should have a periodic review provision to assure IC compliance and effectiveness.	City of Waite Park, BN and EM RPs	MPCA	On-going	N	Y

X. PROTECTIVENESS STATEMENT

The remedies for the Waite Park wells and the BN site are functioning as intended and are currently protective of human health and the environment in the short term.

A protectiveness determination of the remedy at the EM site cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions:

1. Complete a Vapor Intrusion Assessment for indoor air at the EM building and any off-site buildings located over the plume, and take response actions appropriate to the results; and
2. When the new PCE and TCE risk assumptions become available on IRIS, complete the evaluation of whether PCE and TCE cleanup goals in groundwater are protective.

These response actions are anticipated to take about two years, at which time a protectiveness determination will be made.

Long term protectiveness will be achieved at both the EM and BN sites when ground water cleanup goals have been achieved and the remaining institutional controls and institutional controls monitoring plans are in place.

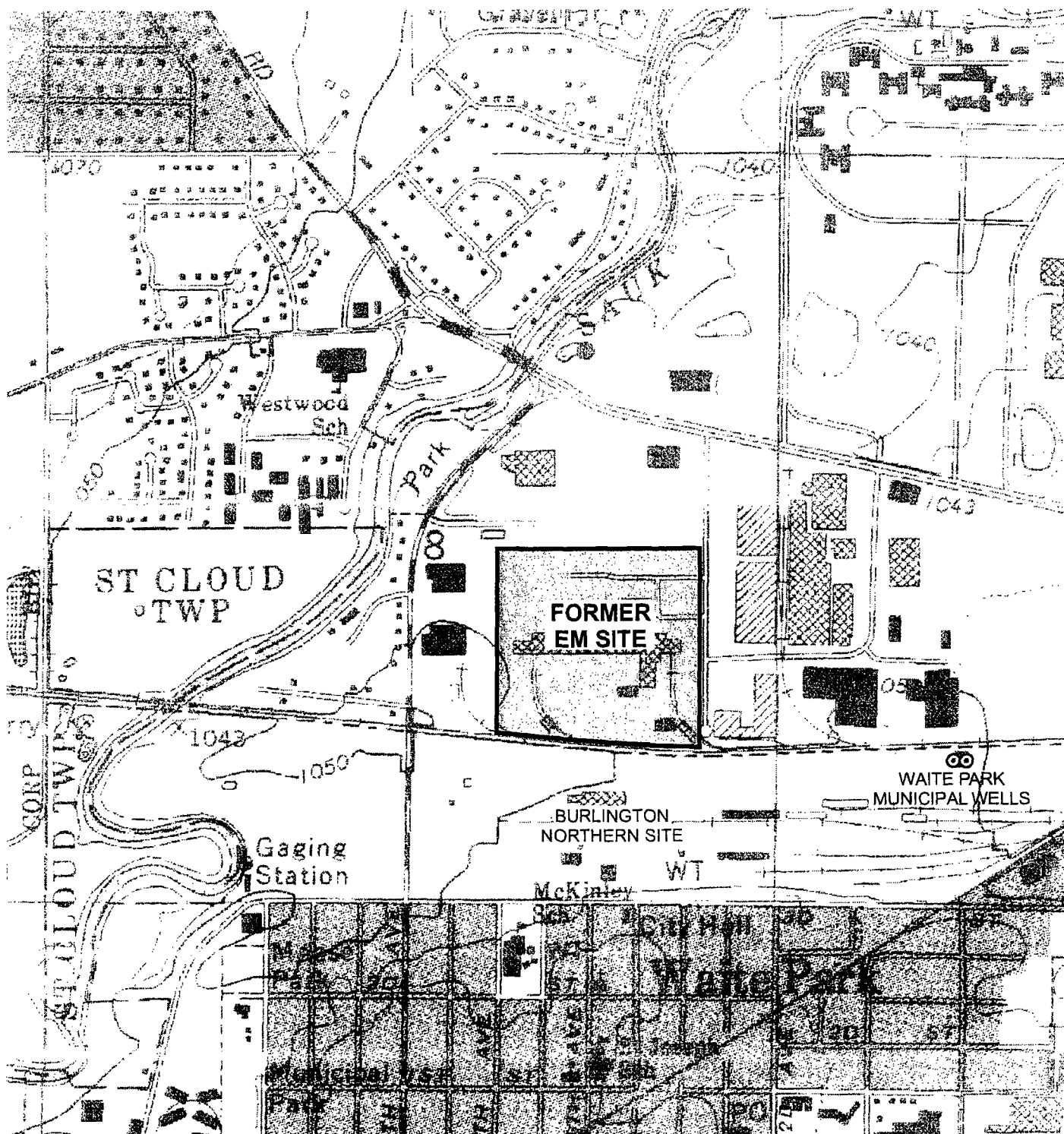
XI. NEXT REVIEW

Hazardous substances, pollutants, or contaminants will remain at the Site that will not allow for unlimited use or unrestricted exposure. EPA or the MPCA, if delegated to do so by EPA, will conduct another Five-Year Review five years from the date of this Review.

APPENDIX A - FIGURES

- Figure 1 - Site Location Map
- Figure 2 - BN Car Shop Site Configuration
- Figure 3 - EM Site Map
- Figure 4 - EM PW-1 Volatile Organic Compounds vs Time
- Figure 5 - EM Shallow Ground Water Elevations
- Figure 6 - EM Deep Ground Water Elevations
- Figure 7 - EM8S Volatile Organic Compounds vs Time
- Figure 8 - EM8D Volatile Organic Compounds vs Time
- Figure 9 - EM22D Volatile Organic Compounds vs Time
- Figure 10 - BN Car Shop Site Property Ownership Map
- Figure 11 - BN Car Shop Site Excavation Activities August 2000 - August 2001
- Figure 12 - Waite Park Municipal Well Locations
- Figure 13 - Influent Total Volatile Organic Compounds Concentrations in Waite Park Municipal Water System

P2373016 Location Map CDR RLG 07-30-04



Source: USGS 7.5' Quadrangle, St. Cloud, MN 1974, Photorevised 1993



QUADRANGLE LOCATION

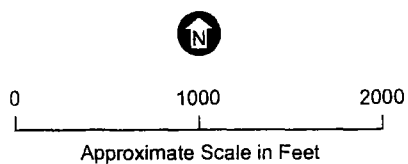


Figure 1

LOCATION MAP
Former Electric Machinery Site
Waite Park, Minnesota

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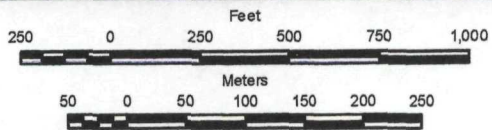
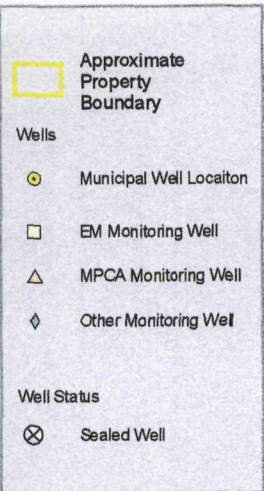
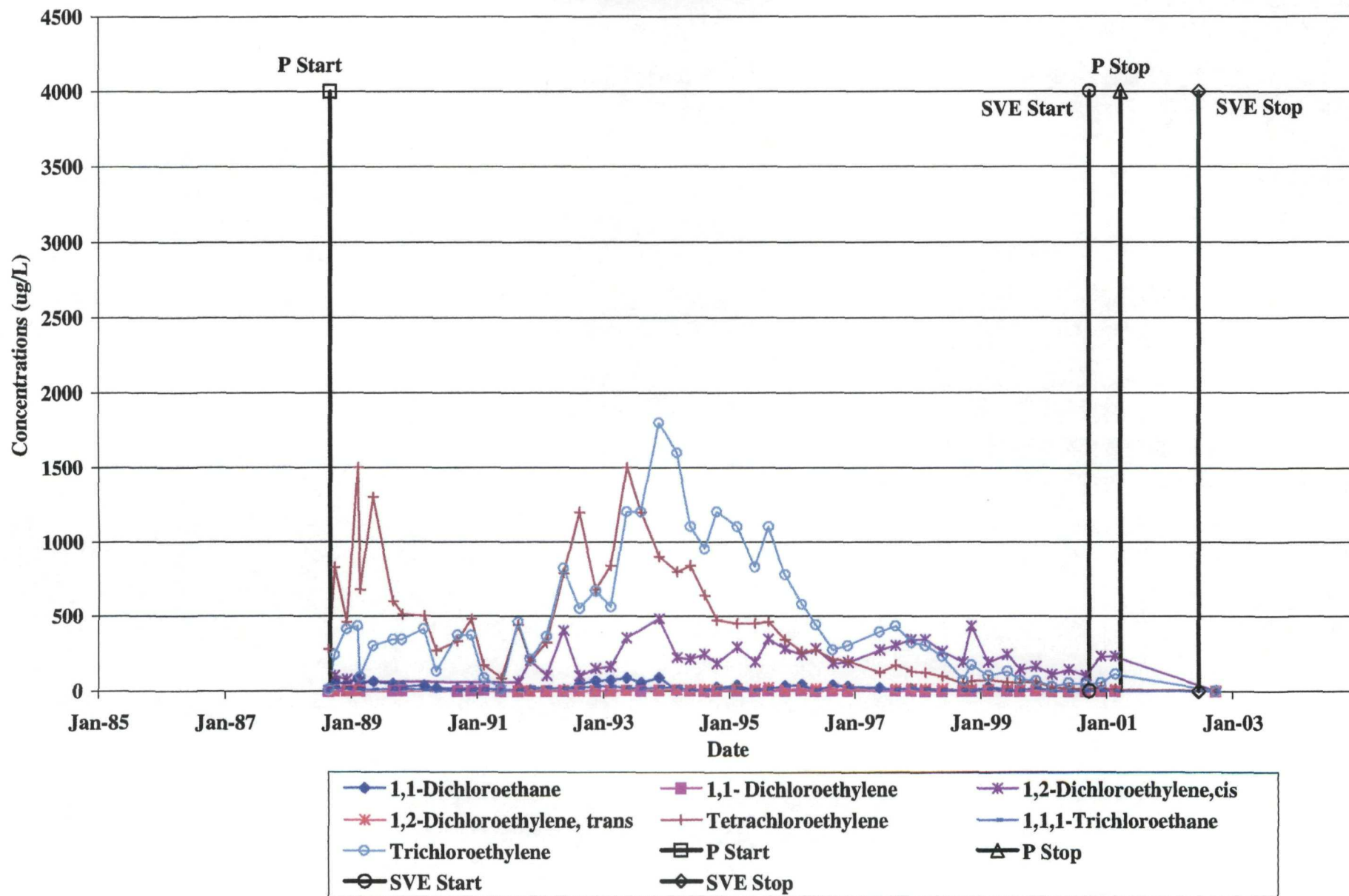


Figure 3

SITE MAP
 Former Electric Machinery Site
 Waite Park, Minnesota

Figure 4
PW1
Volatile Organics Compounds vs. Time



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Groundwater Contour

Wells

EM Monitoring Well

MPCA Monitoring Well

Other Monitoring Well

Well Status

Sealed Well



Feet
100 0 100 200 300 400 500

Meters
50 0 50 100

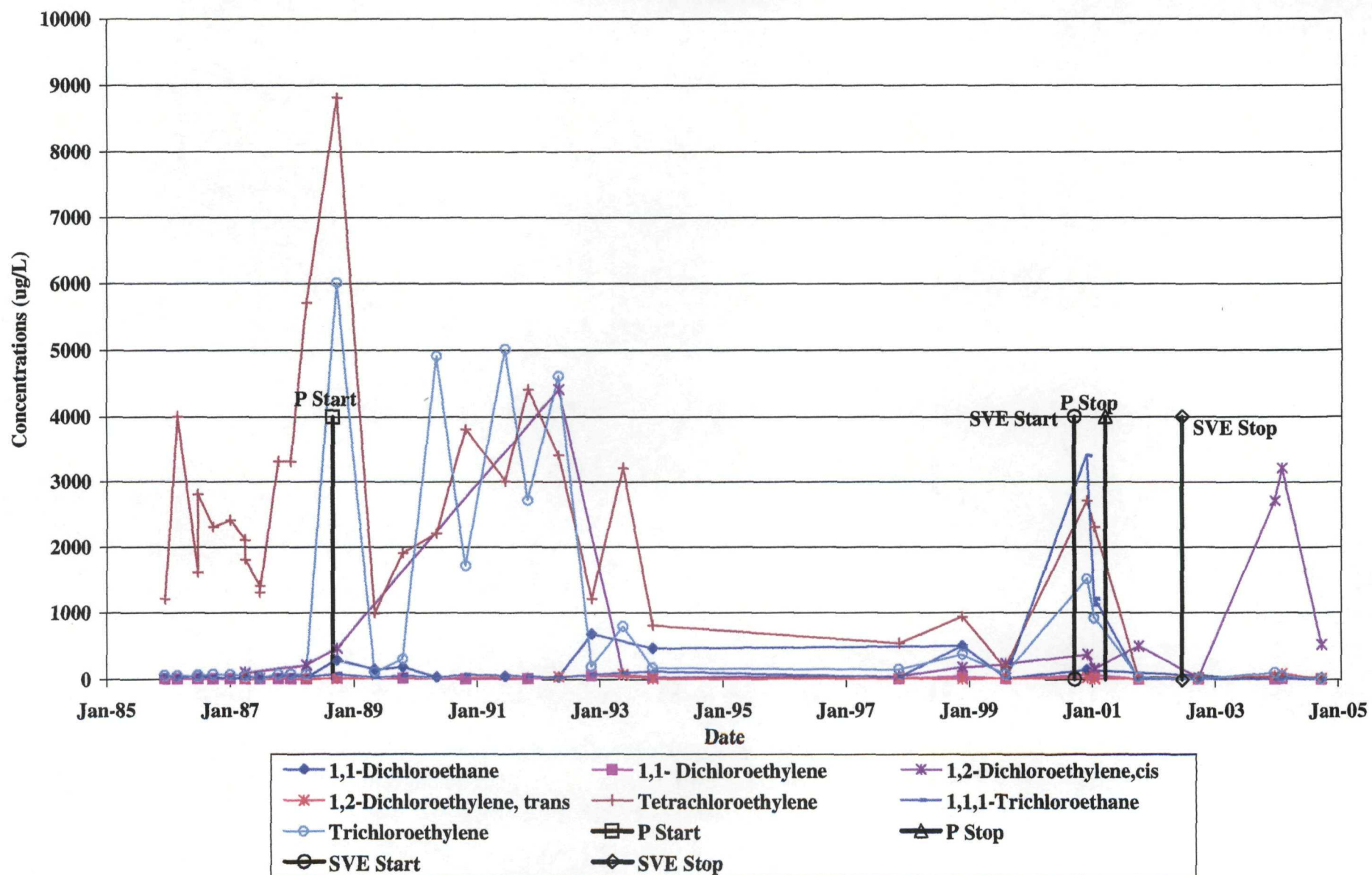
Figure 5

SHALLOW GROUNDWATER ELEVATIONS
Electric Machinery Site
St. Cloud, Minnesota



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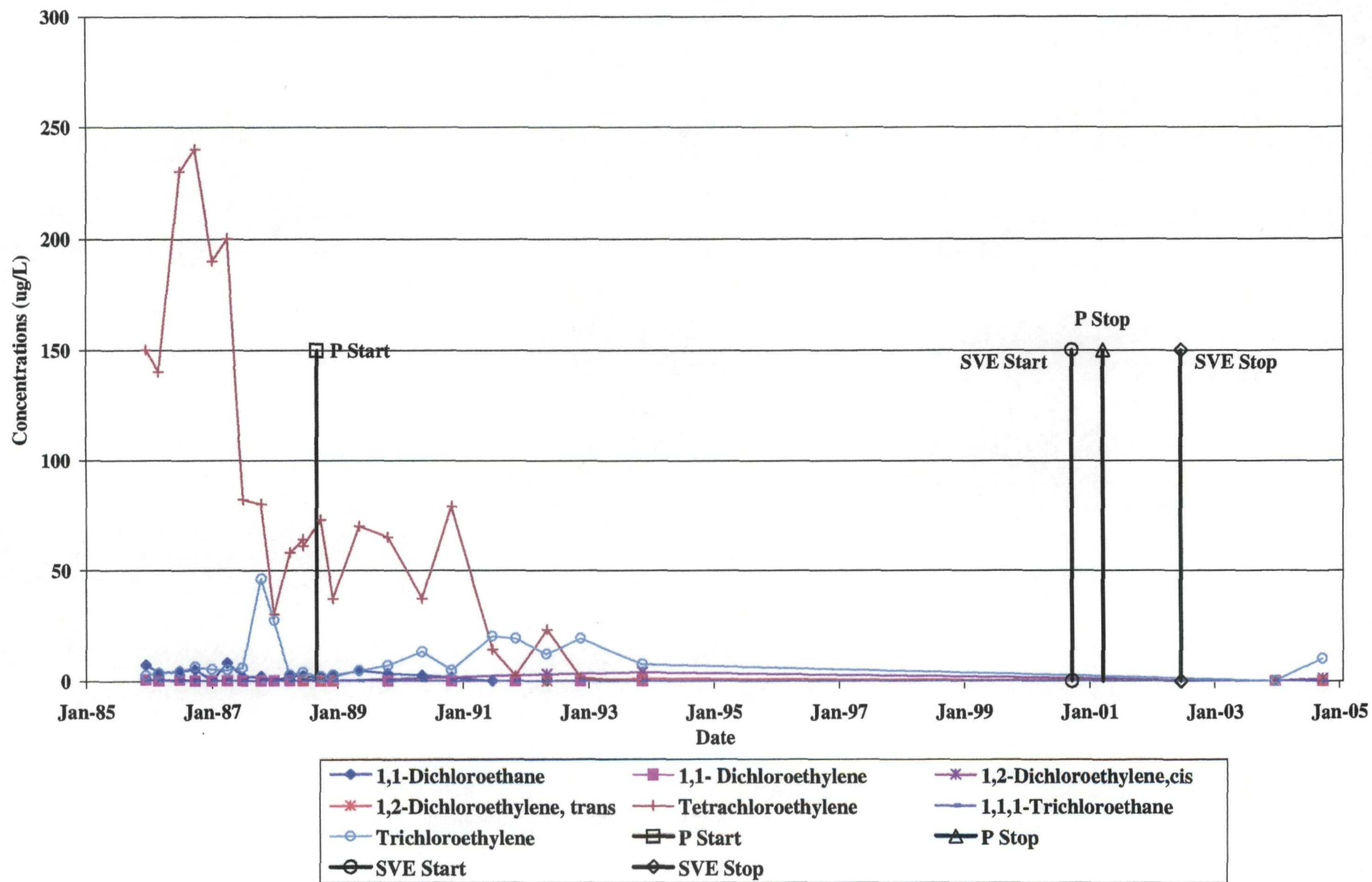
Figure 7
EM8S
Volatile Organics Compounds vs. Time



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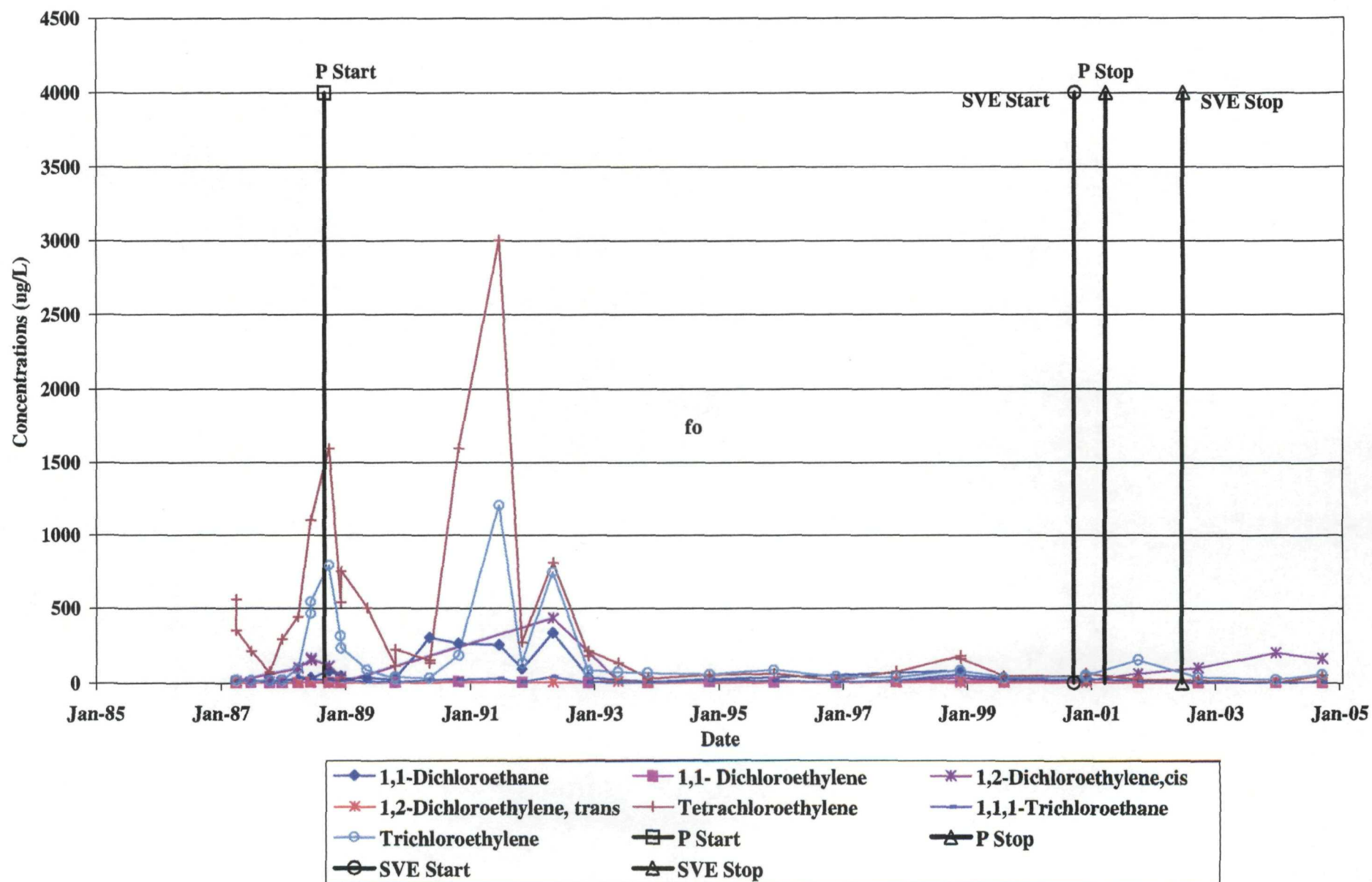
Figure 8
EM8D
Volatile Organics Compounds vs. Time



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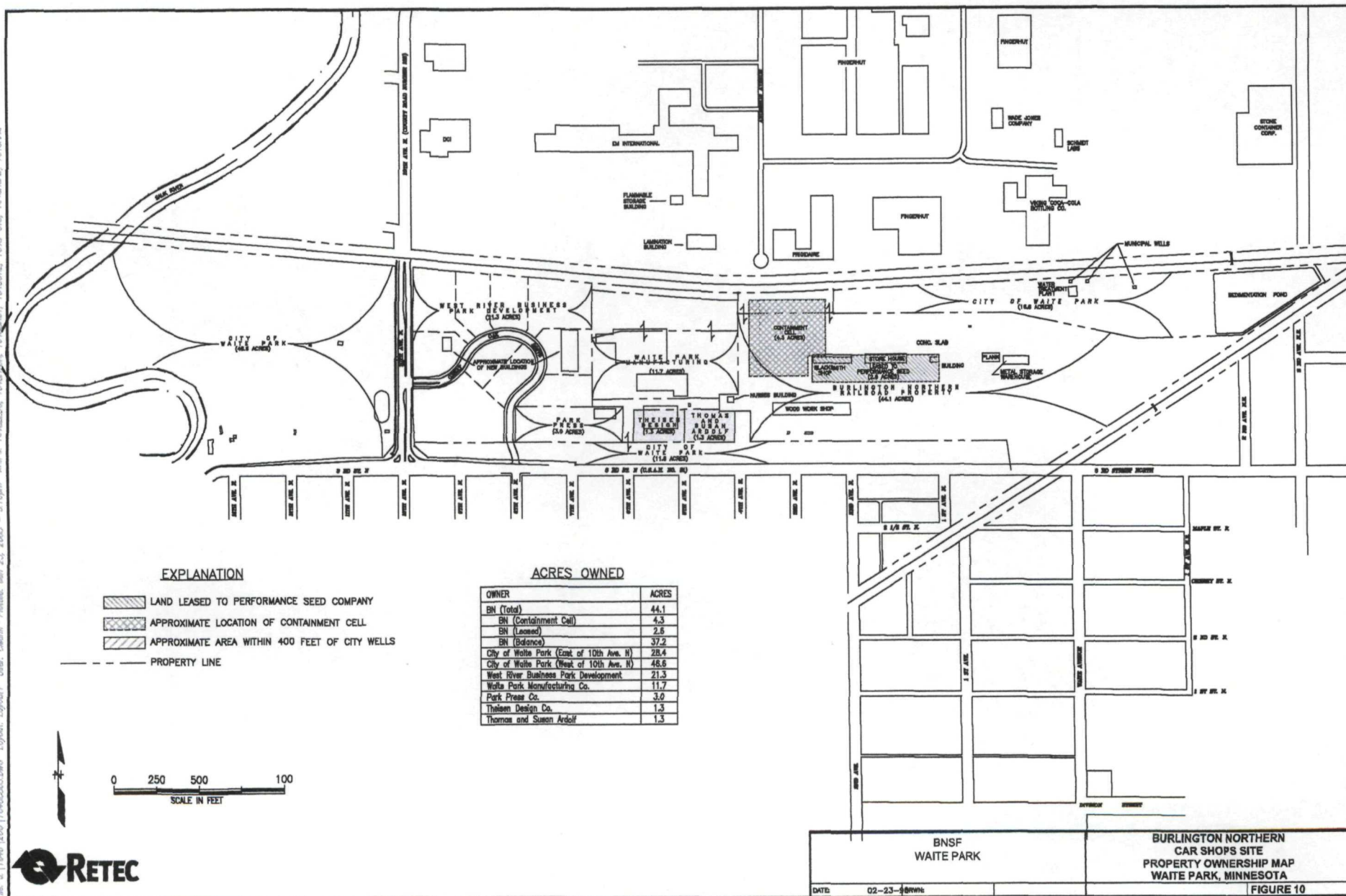
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Figure 9
EM22D
Volatile Organics Compounds vs. Time



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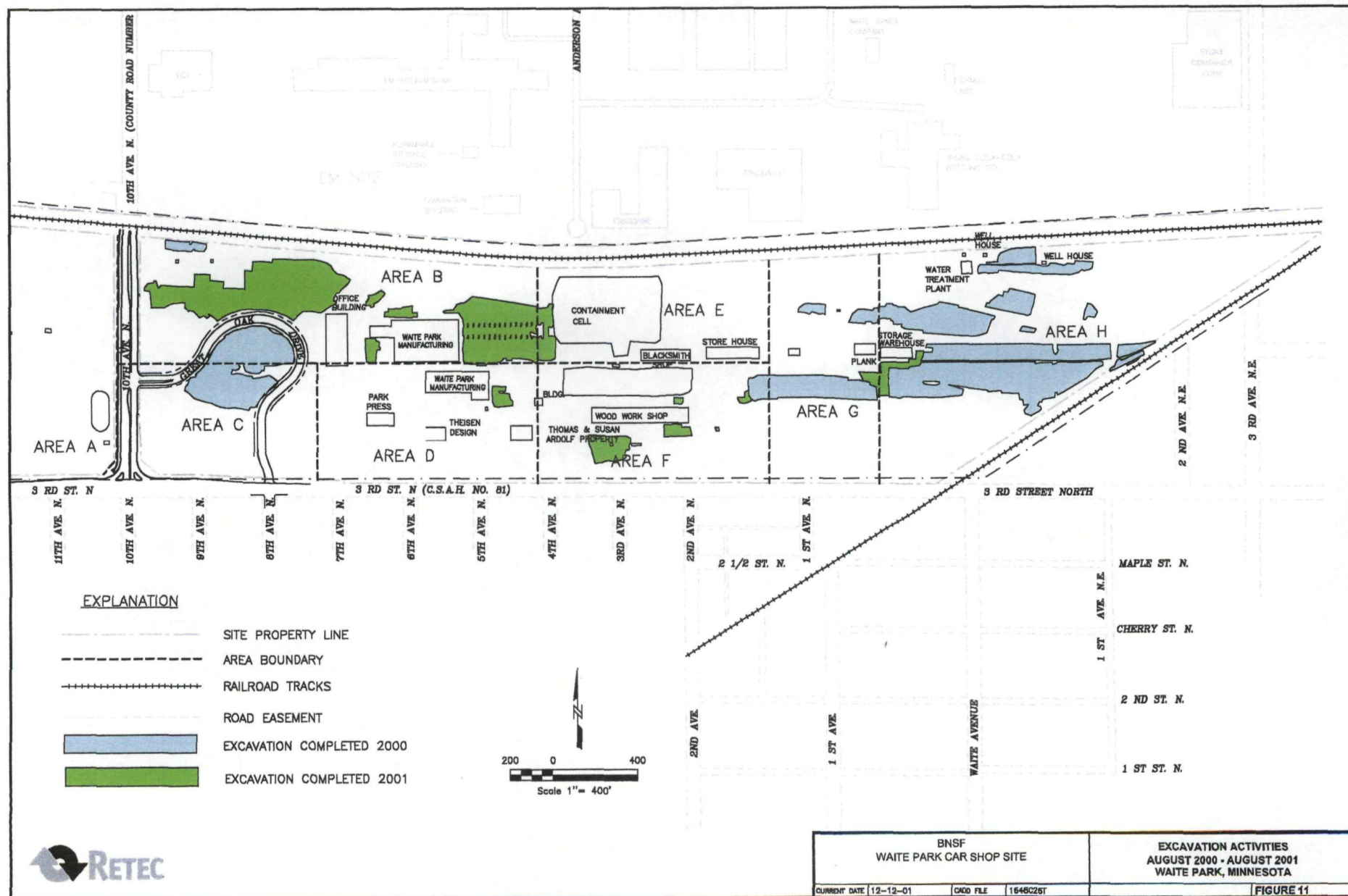
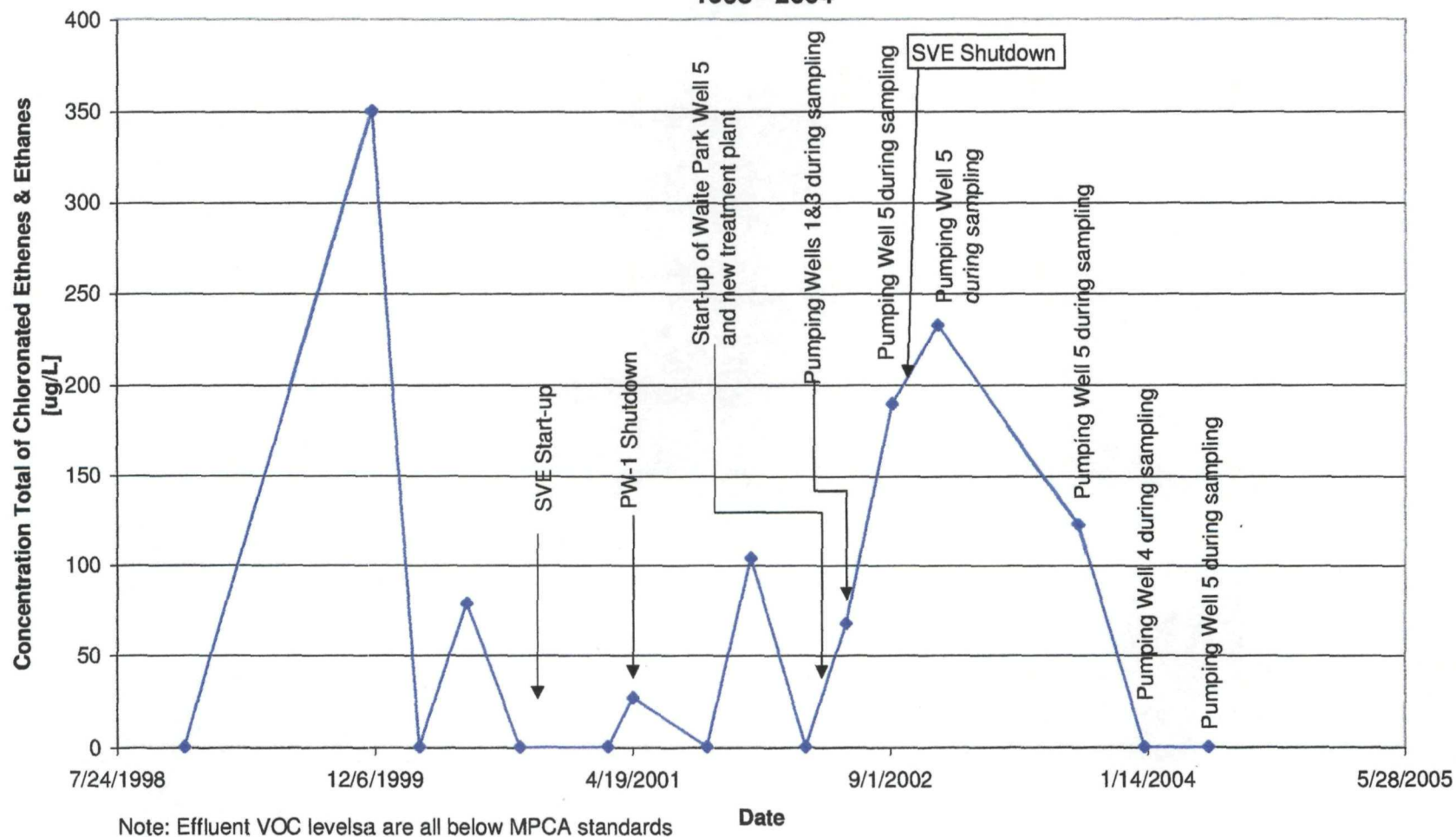




Figure 13
Influent Total VOC Concentrations in the Waite Park Municipal Groundwater Treatment System
1998 - 2004



APPENDIX B - TABLES

Table 1 - 2004 Ground Water Analytical Data – EM Site

Table 1
2004 Groundwater Analytical Data
Former Electric Machinery Site

(concentrations in ug/L, unless noted otherwise)

Location Date	NW2D 5/18/2004	NW2D 10/7/2004	NW2S 5/18/2004	EM3D 1/7/2004	EM3D 10/7/2004	EM4S 1/7/2004	EM4S 10/8/2004	EM8D 1/7/2004	EM8D 10/8/2004	EM8S 1/7/2004	EM8S 2/18/2004	EM8S 10/8/2004	EM9M 1/7/2004	EM9S 1/7/2004	EM10S 1/7/2004
Field Parameters															
pH, standard units	--	--	--	7.40	--	7.23	--	7.63	--	7.34	7.55	--	7.23	--	7.98
Specific Conductance umhos@ 25oC	--	--	--	550	--	600	--	600	--	550	550	--	600	--	600
Temperature, degrees C	--	--	--	9.2	--	9.2	--	9.4	--	9.0	9.2	--	9.5	--	9.8
VOCs															
1,1,1-Trichloroethane	--	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	--
1,1-Dichloroethane	9.6	6.2	<1.0	1.9	2.3	18	<1.0	<1.0	<1.0	1.1	--	<1.0	3.9	<2.0	--
1,1-Dichloroethylene	2.5	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.4	6.5	1.3	<2.0	<2.0	--
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<2.0	<2.0	--
1,2-Dichloroethylene, cis	9.4	7.7	<1.0	9.1	6.4	4.9	<1.0	<1.0	1.1	2700	3200	510	3.8	12	--
1,2-Dichloroethylene, trans	<1.0	<1.0	<1.0	1.0	6.2	<1.0	<1.0	<1.0	<1.0	48	78	8.9	<2.0	<2.0	--
1,4-Dioxane	--	<30	--	<50	<30	<50	<30	<50	<30	<50	--	<30	<100	<100	--
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<2.0	<2.0	--
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<2.0	<2.0	--
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<2.0	<2.0	--
Tetrachloroethylene	--	79	--	<2.0	<2.0	42	12	<2.0	<2.0	35	44	19	160	16	--
Trichloroethylene	--	31	--	<1.0	18	3.5	<1.0	<1.0	10	96	42	6.6	62	9.9	--
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<2.0	<2.0	--
Sum Volatile Organics	22	130	ND	12	33	68	12	ND	11	2900	3400	550	230	38	--

Table 1
2004 Groundwater Analytical Data
Former Electric Machinery Site

(concentrations in ug/L, unless noted otherwise)

Location Date	EM10S 2/18/2004	EM20D 1/7/2004	EM22D 1/7/2004	EM22D 10/7/2004	EM24D 1/7/2004	EM24D 10/7/2004	EM37S 1/7/2004
Field Parameters							
pH, standard units	7.56	7.65	7.36	--	7.77	--	7.29
Specific Conductance umhos@ 25oC	600	600	600	--	650	--	650
Temperature, degrees C	9.6	8.8	9.7	--	9.9	--	9.4
VOCs							
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<2.0
1,1-Dichloroethane	--	<1.0	<1.0	11	<1.0	<1.0	<2.0
1,1-Dichloroethylene	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<2.0
1,2-Dichloroethane	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
1,2-Dichloroethylene, cis	<1.0	<1.0	200	160	2.2	14	<2.0
1,2-Dichloroethylene, trans	<1.0	<1.0	3.9	4.1	<1.0	<1.0	<2.0
1,4-Dioxane	--	<50	<50	<30	<50	<30	<100
Benzene	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Chloroform	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Chloromethane	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Tetrachloroethylene	<2.0	<2.0	<2.0	51	<2.0	<2.0	7.6
Trichloroethylene	<1.0	<1.0	19	56	13	92	<2.0
Vinyl chloride	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Sum Volatile Organics	ND	ND	220	290	15	110	7.6

APPENDIX C - PUBLIC NOTICE

Announcement of a Five-Year Review for the Waite Park Wells NPL Site

The Minnesota Pollution Control Agency (MPCA) and the U.S. Environmental Protection Agency are preparing a Five-Year Review to review the effectiveness of the cleanup for the Waite Park Wells NPL Site located in Waite Park, Minnesota. The review includes the cleanup efforts at the Electric Machinery (EM) site, the Burlington Northern (BN) site and the Waite Park water wells and treatment. The purpose of the review is to determine whether the cleanup activities remain protective of human health and the environment. Monitoring has historically detected volatile organic compounds in the aquifer supplying drinking water for the city of Waite Park. The review will be completed by January 30, 2005.

The remedy at the EM site consisted of groundwater pumping and treatment prior to discharge to the Sauk River. EM has also performed soil excavation and disposal and soil vapor extraction. Groundwater monitoring is ongoing.

The remedy at the BN site included the excavation, treatment and placement of contaminated soil in an on-site containment cell; groundwater monitoring around the containment cell; further soil assessment and excavation, stabilization and off-site disposal of contaminated soil at a landfill.

The remedy at the Waite Park municipal wells consists of treatment for the water supply using aeration towers.

The community can contribute by providing comments regarding the ongoing cleanup efforts. Please call or address your comments to:

Mr. Stephen Mikkelsen, Information Officer
MPCA
North-Central Region
7678 College Road
Baxter, MN 56425
218-855-5001

Ms. Maureen Johnson, Project Leader
MPCA
Remediation Division
520 Lafayette Road N.
St. Paul, MN 55155
651-296-7353
Toll-free 800-657-3864

APPENDIX D - BIBLIOGRAPHY

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APPENDIX E - SITE INSPECTION FORMS AND PHOTOGRAPHS

Five-Year Review Site Inspection Checklist

(Working document for site inspection. Information may be completed by hand and attached to the Five-Year Review report as supporting documentation of site status. "N/A" refers to "not applicable.")

I. SITE INFORMATION	
Site name: <u>Waite Park Wells</u>	Date of inspection: <u>11-3-04</u>
Location and Region: <u>Waite Park, MN/R5</u>	EPA ID: <u>MND981002249</u>
Agency, office, or company leading the five-year review: <u>MPCA</u>	Weather/temperature: <u>Sunny, 40°F</u>
Remedy Includes: (Check all that apply) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <u>BN</u> Landfill cover/containment <u>WP, EM, BN</u> Access controls <u>WP, EM, BN</u> Institutional controls <u>WP, EM</u> Groundwater pump and treatment Surface water collection and treatment Other _____ </div> <div style="width: 45%;"> Monitored natural attenuation Groundwater containment Vertical barrier walls </div> </div>	
Attachments: Inspection team roster <u>attached below</u> Site map attached	
II. INTERVIEWS (Check all that apply)	
1. O&M site manager _____ <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 40%;">Name</div> <div style="width: 20%;">Title</div> <div style="width: 20%;">Date</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 40%;">Interviewed at site</div> <div style="width: 20%;">at office</div> <div style="width: 20%;">by phone</div> <div style="width: 20%;">Phone no. _____</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 40%;">Problems, suggestions;</div> <div style="width: 60%;">Report attached _____</div> </div>	
2. O&M staff _____ <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 40%;">Name</div> <div style="width: 20%;">Title</div> <div style="width: 20%;">Date</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 40%;">Interviewed at site</div> <div style="width: 20%;">at office</div> <div style="width: 20%;">by phone</div> <div style="width: 20%;">Phone no. _____</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 40%;">Problems, suggestions;</div> <div style="width: 60%;">Report attached _____</div> </div>	

Bill Breitzman, Terracon

Maureen Johnson, MPCA PM

Dave Scheer, MPCA TA

Janet Dalglish, Barr Engineering for EM

Mike Bruemmer, City of Waite Park, Lead Person

Gregory Jeffries, Mgr Environmental Remediation, BNSF

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency _____
 Contact _____

Name	Title	Date	Phone no.
Problems; suggestions; Report attached			

Agency _____
 Contact _____

Name	Title	Date	Phone no.
Problems; suggestions; Report attached			

Agency _____
 Contact _____

Name	Title	Date	Phone no.
Problems; suggestions; Report attached			

Agency _____		_____		_____		_____	
Contact _____		_____		_____		_____	
Name		Title		Date		Phone no.	
Problems; suggestions; Report attached		_____		_____		_____	

4. **Other interviews (optional)** Report attached.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)				
1.	O&M Documents			
	O&M manual	WP	Readily available	WP, Up to date N/A
	As-built drawings	WP, BN, EM	Readily available	WP, BN, EM Up to date N/A
	Maintenance logs	WP, BN	Readily available	WP, BN Up to date EM N/A
	Remarks	EM - Janet provided EM site maps + current data.		
2.	Site-Specific Health and Safety Plan	WP, EM, BN	Readily available	WP, BN, EM Up to date N/A
	Contingency plan/emergency response plan	WP, BN	Readily available	WP, BN Up to date EM N/A
	Remarks			
3.	O&M and OSHA Training Records	ORM	Readily available	ORM Up to date N/A
	Remarks	not checked		
4.	Permits and Service Agreements			
	WP, EM Air discharge permit		Readily available	Up to date N/A
	WP, BN Effluent discharge NPDES	WP	Readily available	Up to date EM N/A
	BN Waste disposal, POTW		Readily available	Up to date N/A
	Other permits		Readily available	Up to date N/A
	Remarks			
5.	Gas Generation Records		Readily available	Up to date N/A
	Remarks			
6.	Settlement Monument Records		Readily available	Up to date N/A
	Remarks	no monument at BN Cell		
7.	Groundwater Monitoring Records	WP, EM, BN	Readily available	Up to date N/A
	Remarks	Annual reports, updated record provided on-site by Janet.		
8.	BN Leachate Extraction Records		Readily available	Up to date N/A
	Remarks	from BN leachate collection system at cell, annual report		
9.	Discharge Compliance Records			
	Air No permit needed		Readily available	Up to date N/A
	Water (effluent)	WP, EM	Readily available	Up to date N/A
	Remarks			
10.	Daily Access/Security Logs		Readily available	Up to date N/A
	Remarks	no logs.		

IV. O&M COSTS

1. **O&M Organization**
 State in-house Contractor for State
 PRP in-house EM, BN Contractor for PRP
 Federal Facility in-house Contractor for Federal Facility
 Other WPA - contractor + self.

2. **O&M Cost Records** city records No state or federal funds.
 Readily available in city records Up to date
WP Funding mechanism/agreement in place - RPs constructed plant, WP operates
 Original O&M cost estimate RA did not separate RA from O&M Breakdown attached
 Total annual cost by year for review period if available

From	To	Total cost	Breakdown attached
Date	Date		
From	To	Total cost	Breakdown attached
Date	Date		
From	To	Total cost	Breakdown attached
Date	Date		
From	To	Total cost	Breakdown attached
Date	Date		
From	To	Total cost	Breakdown attached
Date	Date		

3. **Unanticipated or Unusually High O&M Costs During Review Period**
 Describe costs and reasons: Population and water use increased to level of constructing a new treatment plant.

V. ACCESS AND INSTITUTIONAL CONTROLS Applicable N/A

A. Fencing WP, EM, BN cell fences with locking gates, signs.

1. BN Fencing damaged fill with boulders? WP, EM, BN Location shown on site map Gates secured N/A
 Remarks BN cell - gaps at riprap, damage at SE corner w/ 10" gap, bottom cable loose, sign w/ outdated phone #
due to snow storage.

B. Other Access Restrictions

1. WP, EM, BN Signs and other security measures Location shown on site map N/A
 Remarks BN signs - outdated MPCA phone #
Cell Needs more signs at entrance

X

C. Institutional Controls (ICs)				
1.	Implementation and enforcement			
	Site conditions imply ICs not properly implemented	Yes ^{BN} No ^{WP, EM}	N/A	
	Site conditions imply ICs not being fully enforced	Yes ^{BN} No ^{WP, EM}	N/A	
	Type of monitoring (e.g., self-reporting, drive by)	WP, EM <u>BN needs better monitoring</u>		
	Frequency			
	Responsible party/agency	<u>WP - City, EM, BN</u>		
	Contact	Name	Title	Date Phone no.
	Reporting is up-to-date	Yes	No	N/A
	Reports are verified by the lead agency	Yes	No	N/A
	Specific requirements in deed or decision documents have been met	Yes ^{WP}	No ^{EM, BN partial}	N/A
	Violations have been reported	Yes	No	N/A
	Other problems or suggestions:	Report attached		
	<u>See five-year review.</u>			
2.	Adequacy	<u>Physical ICs are adequate</u>	<u>Legal + land records ICs are inadequate</u>	N/A
	Remarks			
D. General				
1.	Vandalism/trespassing	Location shown on site map	<u>No vandalism evident</u>	
	Remarks			
2.	Land use changes on site	N/A		
	Remarks	<u>None BN New construction at West River Business Park</u>		
	<u>BN - Large Area A covered at Area A with parking lot - where does damage go?</u>			
3.	Land use changes off site	N/A		
	Remarks	<u>No changes</u>		
VI. GENERAL SITE CONDITIONS				
A. Roads	Applicable	<u>N/A</u>		
1.	Roads damaged	Location shown on site map	<u>Roads adequate</u>	N/A
	Remarks			

B. Other Site Conditions <u>EM-See last page</u>			
Remarks <u>BN - At SE corner of cell, a pipe from the second floor of Performance Seed building appears to provide drainage of an unknown substance into an iron trench extending from the building, under the cell fence + into the cell. The mossy vegetation inside the cell and near the drainage area indicates soil conditions are different from the rest of the area in the cell with grasses + plants. Sheldon Sturgis is ^{leasing and} purchasing the building which is just a foot from the cell fence.</u>			
VII. LANDFILL COVERS <u>BN</u> <u>Applicable</u> N/A <u>CONTAINMENT CELL</u>			
A. Landfill Surface			
1. <u>BN</u> Settlement (Low spots)	Location shown on site map		<u>Settlement not evident</u>
Areal extent _____	Depth _____		
Remarks _____			
2. <u>BN</u> Cracks	Location shown on site map		<u>Cracking not evident</u>
Lengths _____ Widths _____	Depths _____		
Remarks _____			
3. <u>BN</u> Erosion	Location shown on site map		<u>Erosion not evident</u>
Areal extent _____	Depth _____		
Remarks _____			
4. <u>BN</u> Holes	Location shown on site map		<u>Holes not evident</u>
Areal extent _____	Depth _____		
Remarks _____			
5. <u>BN</u> Vegetative Cover	Grass	Cover properly established	<u>No signs of stress, SE corner</u>
Trees/Shrubs (indicate size and locations on a diagram)	<u>except SE corner see above</u>		
Remarks _____			
6. <u>BN</u> Alternative Cover (armored rock, concrete, etc.)	<u>N/A</u>		
Remarks _____			
7. <u>BN</u> Bulges	Location shown on site map		<u>Bulges not evident</u>
Areal extent _____	Height _____		
Remarks _____			

8.	BN Wet Areas/Water Damage	<u>Wet areas/water damage not evident</u>	
	Wet areas	Location shown on site map	Areal extent _____
	Ponding	Location shown on site map	Areal extent _____
	Seeps	Location shown on site map	Areal extent _____
	Soft subgrade	Location shown on site map	Areal extent _____
	Remarks _____		
9.	BN Slope Instability	Slides	Location shown on site map
	Areal extent _____		<u>No evidence of slope instability</u>
	Remarks _____		
B. Benches BN <u>Applicable</u> N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)			
1.	Flows Bypass Bench	Location shown on site map	N/A or <u>okay</u>
	Remarks _____		
2.	Bench Breached	Location shown on site map	N/A or <u>okay</u>
	Remarks _____		
3.	Bench Overtopped	Location shown on site map	N/A or <u>okay</u>
	Remarks _____		
C. Letdown Channels BN <u>Applicable</u> N/A (Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)			
1.	Settlement	Location shown on site map	<u>No evidence of settlement</u>
	Areal extent _____	Depth _____	
	Remarks _____		
2.	Material Degradation	Location shown on site map	<u>No evidence of degradation</u>
	Material type _____	Areal extent _____	
	Remarks _____		
3.	Erosion	Location shown on site map	<u>No evidence of erosion</u>
	Areal extent _____	Depth _____	
	Remarks _____		

4.	Undercutting <u>BN</u>	Location shown on site map _____	<u>No evidence of undercutting</u>
	Areal extent _____	Depth _____	
	Remarks _____		
5.	Obstructions <u>BN</u> Type _____	Location shown on site map _____	<u>No obstructions</u>
	Size _____	Areal extent _____	
	Remarks _____		
6.	Excessive Vegetative Growth <u>BN</u> Type _____		
	<u>No evidence of excessive growth</u>		
	<u>Vegetation in channels does not obstruct flow</u>		
	Location shown on site map _____	Areal extent _____	
	Remarks _____		
D. Cover Penetrations <u>BN</u> <u>Applicable</u> N/A			
1.	Gas Vents	Active _____	Passive _____
	Properly secured/locked _____	Functioning _____	Routinely sampled _____
	Evidence of leakage at penetration _____		Good condition _____
	N/A		Needs Maintenance _____
	Remarks <u>3 PVC at top, short at 3 ft but not likely to be blocked by snow.</u>		
2.	Gas Monitoring Probes	Properly secured/locked _____	Functioning _____
	Evidence of leakage at penetration _____	Routinely sampled _____	Good condition _____
		Needs Maintenance _____	<u>N/A</u>
	Remarks _____		
3.	Monitoring Wells (within surface area of landfill)	Properly secured/locked _____	Functioning _____
	Evidence of leakage at penetration _____	Routinely sampled _____	Good condition _____
		Needs Maintenance _____	<u>N/A</u>
	Remarks _____		
4.	Leachate Extraction Wells <u>Sump</u>	Properly secured/locked _____	Functioning _____
	Evidence of leakage at penetration _____	Routinely sampled _____	Good condition _____
		Needs Maintenance _____	N/A
	Remarks <u>Cover doesn't close completely, no lock only similar</u>		
	<u>No lock at the sump. Both are inside the locked fence.</u>		
5.	Settlement Monuments	Located _____	Routinely surveyed _____
	Remarks <u>none</u>		<u>N/A</u>

The monitoring well on the north side needs a label

E. Gas Collection and Treatment <u>BN</u>			Applicable	<u>N/A</u>
1.	Gas Treatment Facilities Flaring Thermal destruction Collection for reuse Good condition Needs Maintenance Remarks _____			
2.	Gas Collection Wells, Manifolds and Piping Good condition Needs Maintenance Remarks _____			
3.	Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings) Good condition Needs Maintenance <u>N/A</u> Remarks _____			
F. Cover Drainage Layer <u>BN</u>			Applicable	<u>N/A</u>
1.	Outlet Pipes Inspected <u>No others were visible + Most Functioning</u> Remarks <u>One (toe?) drain at middle of east side 1/2 way up appears to be slanting downward + inward instead of draining out.</u>			
2.	Outlet Rock Inspected <u>Functioning</u> Remarks <u>no weed growth. A fire hydrant is located in the outfall rock at NW corner of cell.</u>			
G. Detention/Sedimentation Ponds <u>BN</u>			Applicable	<u>N/A</u>
1.	Sed. Pond <u>Infiltration Saddle</u> Siltation Areal extent <u>10' x 100'</u> Depth <u>2'</u> <u>N/A</u> Siltation not evident Remarks <u>No water, no sediment, veg et al.</u> <u>The South ditch of the road on the north apparently acts as infiltration also.</u>			
2.	Erosion Areal extent _____ Depth _____ Erosion not evident Remarks _____			
3.	Outlet Works <u>Functioning</u> <u>N/A</u> Remarks _____			
4.	Dam <u>Functioning</u> <u>N/A</u> Remarks _____			

H. Retaining Walls <u>BA</u>		Applicable	<u>N/A</u>
1.	Deformations Horizontal displacement _____ Rotational displacement _____ Remarks _____	Location shown on site map	Deformation not evident Vertical displacement _____
2.	Degradation Remarks _____	Location shown on site map	Degradation not evident
I. Perimeter Ditches/Off-Site Discharge <u>BA</u>		Applicable	<u>N/A</u>
1.	Siltation Areal extent _____ Remarks _____	Location shown on site map	<u>Siltation not evident</u> Depth _____
2.	Vegetative Growth <u>Vegetation does not impede flow</u> Areal extent _____ Remarks _____	Location shown on site map	<u>N/A</u> Type _____
3.	Erosion Areal extent _____ Remarks _____	Location shown on site map	<u>Erosion not evident</u> Depth _____
4.	Discharge Structure Remarks _____	<u>Functioning</u>	<u>N/A</u>
VIII. VERTICAL BARRIER WALLS		Applicable	<u>N/A</u>
1.	Settlement Areal extent _____ Remarks _____	Location shown on site map	Settlement not evident Depth _____
2.	Performance Monitoring Performance not monitored Frequency _____ Head differential _____ Remarks _____	Type of monitoring _____	Evidence of breaching

IX. GROUNDWATER/SURFACE WATER REMEDIES		Applicable	N/A
A. Groundwater Extraction Wells, Pumps, and Pipelines		Applicable	N/A
1.	Pumps, Wellhead Plumbing, and Electrical WPW Good condition WPW All required wells properly operating Needs Maintenance ^{EM} N/A Remarks <u>City wells extract. EM well is shutdown.</u>		
2.	Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances WPW Good condition Needs Maintenance Remarks <u>New plant</u>		
3.	Spare Parts and Equipment WPW Readily available Good condition Requires upgrade Needs to be provided Remarks <u>New plant</u>		
EM B. Surface Water Collection Structures, Pumps, and Pipelines		Applicable	N/A
1.	Collection Structures, Pumps, and Electrical <u>EM French drain + sump</u> Good condition Needs Maintenance Remarks <u>never needed - sump water did not require treatment.</u>		
2.	Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances Good condition Needs Maintenance Remarks _____		
3.	Spare Parts and Equipment Readily available Good condition Requires upgrade Needs to be provided Remarks _____		

C. Treatment System		WPW Applicable EMN/A (shutdown)	
1.	Treatment Train (Check components that apply) Metals removal Oil/water separation Bioremediation WPW Air stripping to drinking water Carbon adsorbers Filters <u>iron removal</u> Additive (e.g., chelation agent, flocculent) <u>CO₂ keeps iron from settling</u> Others _____ Good condition Needs Maintenance <input checked="" type="checkbox"/> Sampling ports properly marked and functional <input checked="" type="checkbox"/> Sampling/maintenance log displayed and up to date <input checked="" type="checkbox"/> Equipment properly identified Quantity of groundwater treated annually <u>pre Well 5: 292,000,000 GPY</u> <u>554,470,000 GPY est. 2005</u> Quantity of surface water treated annually <u>NA</u> Remarks <u>New plant electronic flow meters</u> <u>2002 - packed towers cleaned</u>		Population White Park 6000
2.	Electrical Enclosures and Panels (properly rated and functional) N/A <u>Good condition</u> Needs Maintenance Remarks _____		
3.	Tanks, Vaults, Storage Vessels N/A <u>Good condition</u> Proper secondary containment Needs Maintenance Remarks _____		
4.	Discharge Structure and Appurtenances N/A <u>Good condition</u> Needs Maintenance WPW Remarks <u>Not visible 3000 ft pipe to Sauk River, piggable</u> <u>larger diameter than old, NPDES permit</u>		
5.	Treatment Building(s) N/A <u>Good condition (esp. roof and doorways)</u> Needs repair Chemicals and equipment properly stored Remarks _____		
6.	Monitoring Wells (pump and treatment remedy) <u>~100ft deep</u> WPW Properly secured/locked <u>WPW</u> Functioning Routinely sampled <u>Good condition</u> All required wells located Needs Maintenance N/A Remarks <u>EM wells are locked, all but a few function</u> <u>are routinely sampled per plan, but are rusted, some</u> <u>not found.</u>		
D. Monitoring Data			
1.	Monitoring Data WPW EMN/A <u>is routinely submitted on time</u> <u>Is of acceptable quality</u>		
2.	Monitoring data suggests: WPW EMN/A <u>Groundwater plume is effectively contained</u> WPW <u>Contaminant concentrations are declining</u> <u>EM - cont. conc. fluctuate</u>		

D. Monitored Natural Attenuation <u>NA</u>			
1.	Monitoring Wells (natural attenuation remedy)	Properly secured/locked	Functioning
		Routinely sampled	Good condition
	All required wells located	Needs Maintenance	N/A
Remarks _____			
X. OTHER REMEDIES			
If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be <u>soil vapor extraction</u> . <u>BN System test shutdown since 2002 July</u>			
XI. OVERALL OBSERVATIONS			
A. Implementation of the Remedy			
Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).			
<u>See five-year review</u>			
<u>WPW Safe drinking water monitored by City, reviewed</u>			
<u>by MDH + MPCA</u>			
<u>EM remedy is not reaching MCL in ground</u>			
<u>water</u>			
<u>BN remedy functions at cell</u>			
B. Adequacy of O&M			
Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.			
<u>BN needs to pay attention to security at cell</u>			

C. Early Indicators of Potential Remedy Problems
<p>Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.</p> <p>increasing leachate volume at BN cell - unknown reason</p>
D. Opportunities for Optimization
<p>Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.</p> <p>EM optimization of monitoring plan occurs annually.</p>

Observations.

At EM, the highline sits on a mound next to the area that was excavated in the SW. We located a large number of the wells and Janet said she would GPS and confirm IDs + map them.

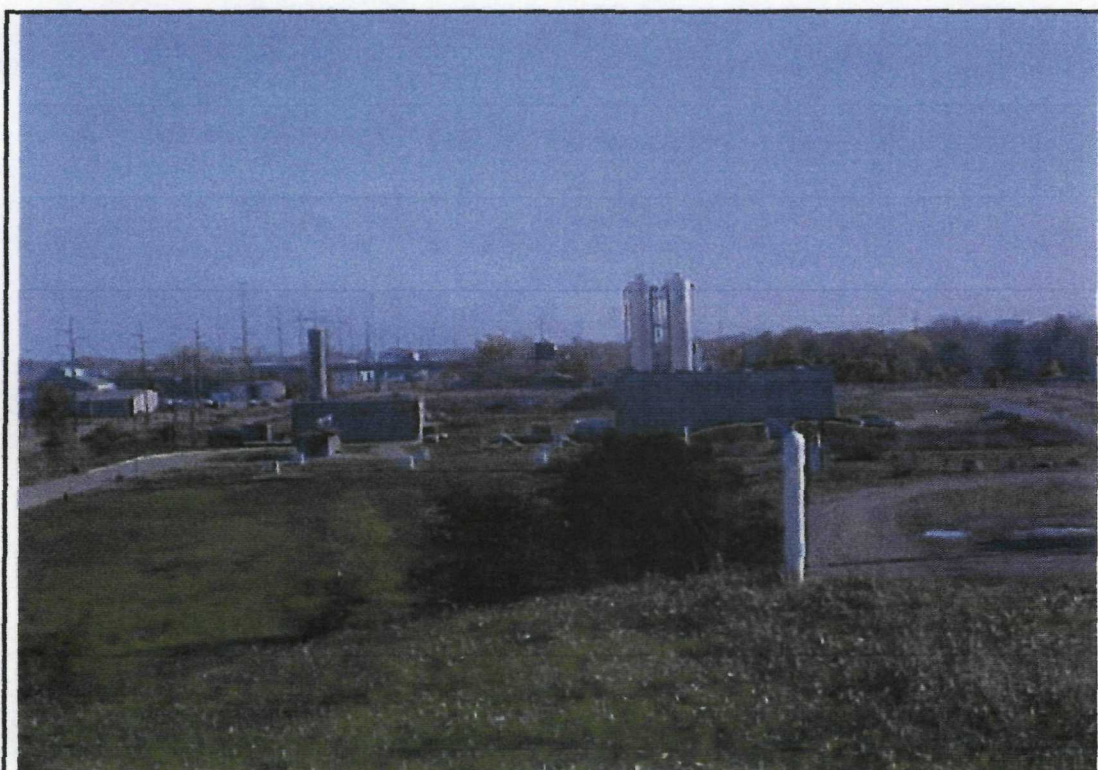
Along the east side of the building wall just SW of PW 1+3, there is an unidentified PVC stickup with 2 bumper posts.

2 open pipes deeper than 2.5 feet are just north of the high voltage equipment area.

Site Name: Waite Park Wells Site
City, State: Waite Park, MN
Date of Photograph: November 3, 2004



1. Generally looking east at the pumphouse for well 5 and the new treatment building.



2. Generally looking east from the BN containment cell at the city well field and treatment building.

Site Name: BN Car Shop Site
City, State: Waite Park, MN
Date of Photograph: November 3, 2004



1. Looking east at the containment cell on the BN site. Note the sump and lysimeter.



2. View of the leachate collection sump and the lysimeter.

Site Name: BN Car Shop Site
City, State: Waite Park, MN
Date of Photograph: November 3, 2004

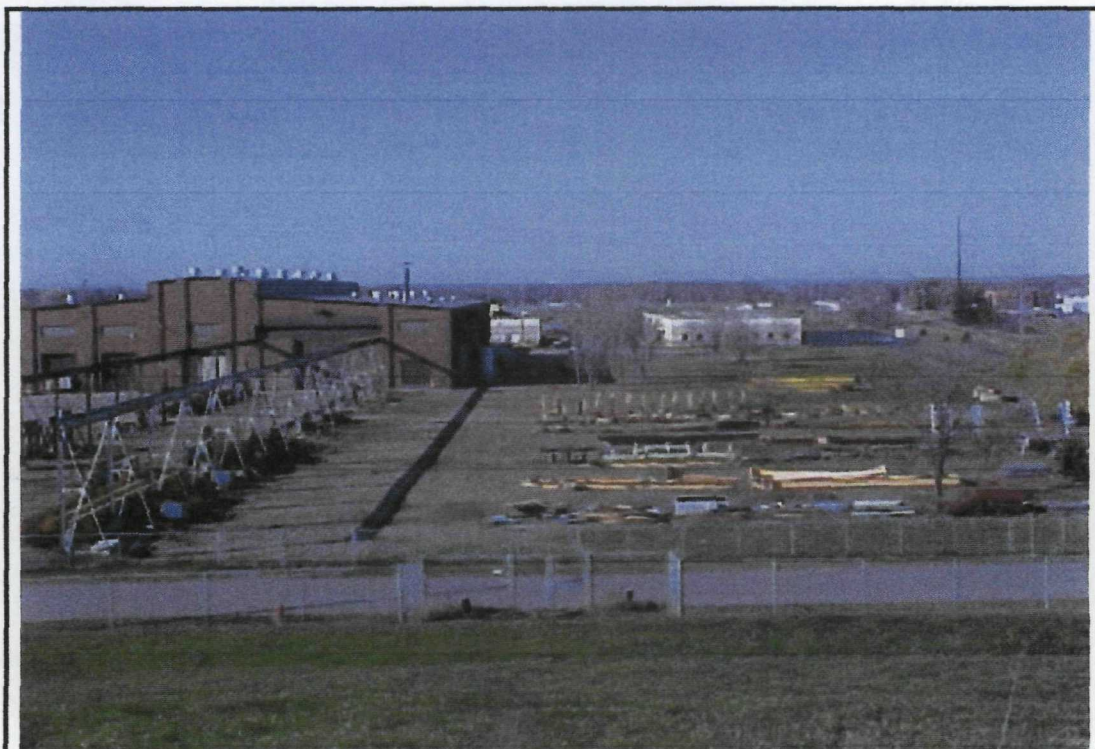


3. Looking east at the vents on the top of the containment cell.



4. Gap between the bottom of the fence and the rip-rap stormwater runoff channel at the containment cell.

Site Name: BN Car Shop Site
City, State: Waite Park, MN
Date of Photograph: November 3, 2004

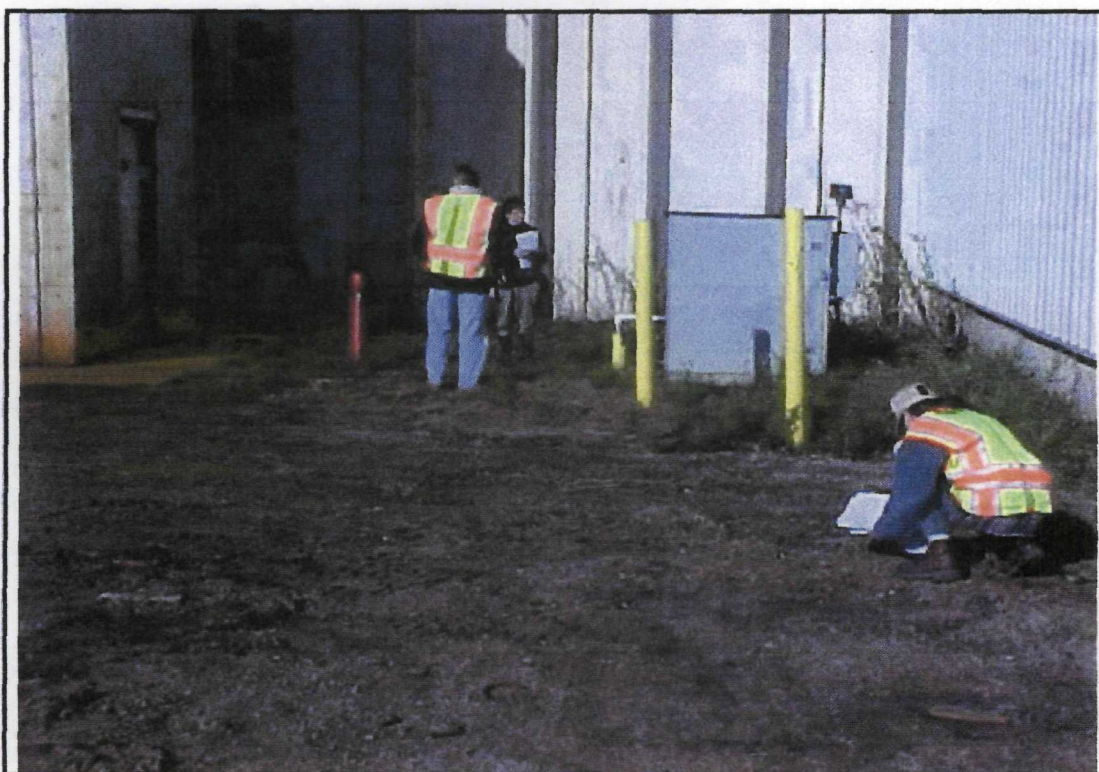


5. Looking west from the top of the containment cell on the BN property.

Site Name: Electric Machinery Site
City, State: Waite Park, MN
Date of Photograph: November 3, 2004



1. View of PW-1 and PW-3 on the EM site.

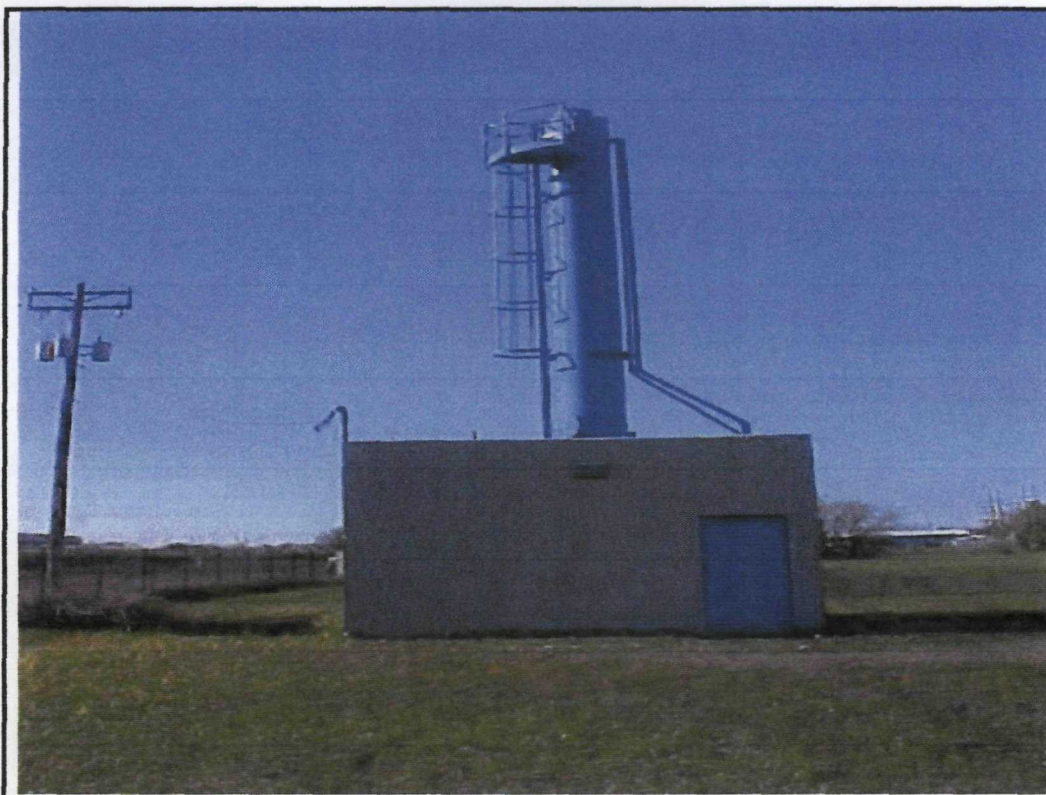


2. View of the SVE blower at EM9S on the EM site.

Site Name: Electric Machinery Site
City, State: Waite Park, MN
Date of Photograph: November 3, 2004



3. View of the ground water collection sump on the EM site.



4. View of the ground water treatment building on the EM site.

APPENDIX F - INSTITUTIONAL CONTROL DOCUMENTS

Affidavit of Thomas J. Patnode, July 21, 1986

Quit Claim Deed, August 20, 1986

Affidavit, December 28, 1989

Warranty Deed, December 14, 1989

Access Agreement, December 28, 1989

Warranty Deed, September 13, 1995

Quit Claim Deed, March 27, 1997

Affidavit of Richard Miller, March 20, 1997

Easement and Declaration of Restrictions and Covenants, May 6, 1997

Easement, June 11, 1997

Affidavit Concerning Real Property Contaminated with Hazardous Substances,
May 1, 2001

Affidavit Concerning Real Property Contaminated with Hazardous Substances,
October 16, 2001

Affidavit Concerning Real Property Contaminated with Hazardous Substances,
November 16, 2001

Modification of Easement and Declaration of Restrictions and Covenants,
December 21, 2001

Affidavit of Thomas J. Patnode, July 21, 1986

STATE OF MINNESOTA)
COUNTY OF RAMSEY) ss.

AFFIDAVIT OF

THOMAS J. PATNODE

THOMAS J. PATNODE, being first duly sworn under oath, deposes and states:

1. I am employed by Burlington Northern Railroad Company (BN) in the capacity of Environmental Engineer for the Twin Cities Region, which encompasses BN facilities in Minnesota and portions of North Dakota, South Dakota, Nebraska, Iowa and Wisconsin. My business address is 176 East Fifth Street, St. Paul, Minnesota 55101.

2. As part of my duties, I am responsible for various environmental matters involving railroad operations on the Twin Cities Region. This includes supervising hazardous material or waste investigations that may arise from past or present disposal practices on the Burlington Northern Railroad. In this regard, I represent BN as the Environmental Engineer. This affidavit is being submitted to the Stearns County Recorder pursuant to the disclosure requirements of MSA §115B.16, and I have personal knowledge of the statements herein. The legal description for the property which this disclosure covers is as follows:

That part of the South Half of the Southwest Quarter (S $\frac{1}{2}$ SW $\frac{1}{4}$) and the South Half of the Southeast Quarter (S $\frac{1}{2}$ SE $\frac{1}{4}$) of Section 8, Township 124 North, Range 28 West, together with that part of the South Half of the Southwest Quarter (S $\frac{1}{2}$ SW $\frac{1}{4}$) of Section 9, Township 124 North, Range 28 West in the City of Waite Park, Stearns County, Minnesota described as follows:

Commencing at the South quarter corner of said Section 8; thence North 00 degrees 09 minutes 53 seconds West, assumed bearing, along the North-South quarter line and along the centerline of 10th Avenue, a distance of 1182.41 feet to a point on the Southerly right-of-way line of Burlington Northern Railroad, said point being the Point of Beginning of the following described parcel; thence South 85 degrees 06 minutes 57 seconds East, along said Southerly right-of-way line, 1595.99 feet; thence Easterly a distance of 760.22 feet along a tangential curve concave to the North having a radius of 5729.58 feet and a central angle of 07 degrees 36 minutes 08 seconds; thence North 87 degrees 16 minutes 55 seconds East, along said Southerly right-of-way line, and along tangent 2943.41 feet to the East line of said Southwest Quarter of Section 9; thence South 00 degrees 25 minutes 17 seconds East, along said East line, 186.37 feet; thence South 57 degrees 43 minutes 00 seconds West 399.31 feet; thence South 88 degrees 39 minutes 10 seconds West 621.65 feet; thence North 78 degrees 37 minutes 20 seconds West 755.25 feet; thence North 89 degrees 57 minutes 55 seconds West 1614.25 feet; thence South 00 degrees 02 minutes 05 seconds West 467.56 feet; thence North 89 degrees 57 minutes 55 seconds West 113.34 feet; thence South 00 degrees 02 minutes 05 seconds West 97.30 feet; thence South 89 degrees 57 minutes 55 seconds East 183.34 feet; thence South 00 degrees 02 minutes 05 seconds West 177.16 feet; thence South 89 degrees 59 minutes 25 seconds East 1514.10 feet; thence South 08 degrees 12 minutes 25 seconds East 174.12 feet to a point on the South line of said Section 9; thence North 89 degrees 33 minutes 37 seconds West, along said South line, 938.16 feet to the Southwest corner of said Section 9; thence North 90 degrees 00 minutes 00 seconds West, along the South line of said Section 8, a distance of 2644.45 feet to the South quarter corner of said Section 8; thence continuing along said South line, North 90 degrees 00 minutes 00 seconds West 1342.00 feet; thence Northwesterly at a right angle to the Sauk River to the centerline of the Sauk River; thence Northerly, Westerly and Northeasterly along said centerline of the Sauk River to the intersection with the Southerly right-of-way line of said Burlington Northern Railroad, said point bears North 85 degrees 06 minutes 57 seconds West from the Point of Beginning; thence South 85 degrees 06 minutes 57 seconds East, along said Southerly right-of-way line, 1763 feet more or less to the Point of Beginning. Containing 126.4 acres more or less. Subject to 3rd Street North and 10th Avenue right-of-way easement and subject to any easements of record. Also subject to the following described easements:

This property is hereinafter referred as the "BN site."

3. Great Northern Railroad began railroad car construction and maintenance operations at the BN site in approximately 1894. During the next seventy years, the Great Northern Shop and later the St. Cloud Shop manufactured and maintained railroad equipment at the site. This included wooden box cars, steel baggage cars, steel box cars, snow dozers, wheel flats, weed spray cars, outfit cars, and other types of railroad equipment. Since approximately 1963, the shop has been devoted exclusively to performing repairs to various types of freight equipment. Most operations at the site are currently shut down.

4. The primary substances in the shallow and deep aquifers on the BN site include 1,1-dichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,2,2-tetrachloroethylene, and chloroform. Total volatile organic compound concentrations are generally higher in the deeper aquifers, ranging from not detected at Wells 2D and 11D to 232 ug/l at Monitoring Well 12D. Concentrations in the shallow aquifers range from not detected at several locations to 64 ug/l at Monitoring Well 4D.

5. Four areas on the BN site from which substances may have been released to the soil or ground water are identified in the Request For Response Action (RFRA) issued by the Minnesota Pollution Control Agency on October 22, 1985. Existing data pertaining to each of these areas are discussed below. Additionally, several other possible source areas were identified during the site visit, employee interviews, and review of BN records. These areas are also discussed. The attached site map specifically identifies the following areas:

a. Waste Lagoons West of 10th Avenue

1974 aerial photos of the site indicate the presence of three waste lagoons near the western end of the Car Shop. According to BN records and employee interviews, paint waste, heavy oils and sludge from the Power Plant and shop operations may have been disposed of in this area. Other materials, such as welding wire, bolts, rivets, and sandblast sand, may also have been placed in the lagoons. The lagoons were subsequently covered with soil, and grass later grew at the surface. An oily material can sometimes be seen oozing from the cover material.

b. Calcium Hydroxide (Lime) Disposal Area

An acetylene plant operated at the BN site during the 1950's and 1960's. Calcium hydroxide (lime) residues generated during the operation of the facility were discarded in an area at the southwest corner of the shop complex. The lime was sometimes used locally for whitewash. In addition, cooking oil and molasses from steam-cleaning tank cars may have been disposed of at this location. The area was subsequently covered with soil in which grass later grew.

It should be noted that originally it was reported that calcium carbide was disposed of at this location. Since calcium carbide readily reacts with water (rain) to form calcium hydroxide, the latter is considered the most likely substance in this area.

c. Paint Shop

The Paint Shop is located in the west-central portion of the BN site. This facility was used to repaint and stencil railroad cars after they were stripped, sandblasted, and repaired elsewhere in the Car Shop.

Repainting the cars was accomplished by spray painting in an area having a dirt floor.

Site plans indicate that two underground storage tanks are located south of the Paint Shop.

d. Possible Barrelled Paint Waste Disposal Area

According to outside sources, there may be barrels of paint waste from the Paint Shop buried on the BN site. There is very little information available regarding such disposal. However, if this did occur, the area east of the municipal wells, near the railroad spurs, is considered the most likely location.

e. Other Possible Source Areas

In addition to the potential source areas described previously, several other areas on the BN site may have been contaminant sources. A brief description of these other possible source areas follows:

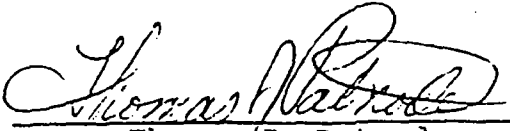
A half-buried tank that once contained No. 6 fuel oil is located south of the Boiler Building. Some fuel and sludge remain in the tank.

A tank car may have been buried near the northern boundary of the BN property. It is reported that a black liquid oozes to the surface above the tank car on a hot day.

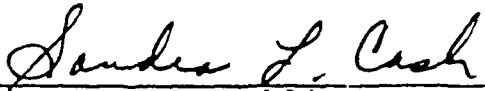
The area immediately east of the municipal well houses has been used for sandblast disposal. Sand and paint chips are still visible on the ground surface.

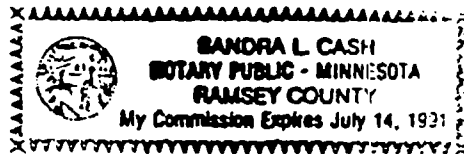
Other possible source areas for potential soil and ground-water contamination on the BN site have been identified on the attached map. They are the waste lagoons, the calcium hydroxide disposal area, the Paint Shop, the possible barrelled paint waste disposal area, an underground fuel tank south of the Boiler Building, a buried railroad car containing wastes, and the sandblast disposal area.

The previously described generalizations were made based on the available data. However, there are gaps and inconsistencies in the data and further investigations are required in order to more completely characterize the nature and extent of possible soil and ground-water contamination in the study area.


Thomas J. Patnode

Subscribed and sworn to before me
this 21st day of July, 1986.


Notary Public



Quit Claim Deed, August 20, 1986

QUITCLAIM DEED

BURLINGTON NORTHERN RAILROAD COMPANY (formerly named Burlington Northern Inc.), a Delaware corporation, Grantor, for Ten and No/100 Dollars (\$10.00) conveys and quitclaims, without any covenants of warranty whatsoever and without recourse to the Grantor, its successors and assigns as to warranties of title, to the CITY OF WAITE PARK, a municipal corporation, of City Hall, P. O. Box 339, 253 North 5th Avenue, Waite Park, Minnesota 56387, Grantee, all its right, title and interest, if any, in the following described real estate:

That part of the South Half of the Southwest Quarter (S $\frac{1}{2}$ SW $\frac{1}{4}$) and the South Half of the Southeast Quarter (S $\frac{1}{2}$ SE $\frac{1}{4}$) of Section 8, Township 124 North, Range 28 West, together with that part of the South Half of the Southwest Quarter (S $\frac{1}{2}$ SW $\frac{1}{4}$) of Section 9, Township 124 North, Range 28 West in the City of Waite Park, Stearns County, Minnesota described as follows:

Commencing at the South quarter corner of said Section 8; thence North 00 degrees 09 minutes 53 seconds West, assumed bearing, along the North-South quarter line and along the centerline of 10th Avenue, a distance of 1182.41 feet to a point on the Southerly right-of-way line of Burlington Northern Railroad, said point being the Point of Beginning of the following described parcel; thence South 85 degrees 06 minutes 57 seconds East, along said Southerly right-of-way line, 1595.99 feet; thence Easterly a distance of 760.22 feet along a tangential curve concave to the North having a radius of 5729.58 feet and a central angle of 07 degrees 36 minutes 08 seconds; thence North 87 degrees 16 minutes 55 seconds East, along said Southerly right-of-way line, and along tangent 2943.41 feet to the East line of said Southwest Quarter of Section 9; thence South 00 degrees 25 minutes 17 seconds East, along said East line, 186.37 feet; thence South 57 degrees 43 minutes 00 seconds West 399.31 feet; thence South 88 degrees 39 minutes 10 seconds West 621.65 feet; thence North 78 degrees 37 minutes 20 seconds West 755.25 feet; thence North 89 degrees 57 minutes 55 seconds West 1614.25 feet; thence South 00 degrees 02 minutes 05 seconds West 467.56 feet; thence North 89 degrees 57 minutes 55 seconds West 113.34 feet; thence South 00 degrees 02 minutes 05 seconds West 97.30 feet; thence South 89 degrees 57 minutes 55 seconds East 183.34 feet; thence South 00 degrees 02 minutes 05 seconds West 177.16 feet; thence South 89 degrees 59 minutes 25 seconds East 1514.10 feet; thence South 08 degrees 12 minutes 25 seconds East 174.12 feet to a point on the South line of said Section 9; thence North 89 degrees 33 minutes 37 seconds West, along said South line, 938.16 feet to the Southwest corner of said Section 9; thence North 90 degrees 00 minutes 00 seconds West, along the South line of said Section 8, a distance of 2644.45 feet to the South quarter corner of said Section 8; thence continuing along said South line, North 90 degrees 00 minutes 00 seconds West 1342.00 feet; thence Northwesterly at a right angle to the Sauk River to the centerline of the Sauk River; thence Northerly, Westerly and Northeasterly along said centerline of the Sauk River to the intersection with the Southerly right-of-way line of said Burlington Northern Railroad, said point bears North 85 degrees 06 minutes 57 seconds West from the Point of Beginning; thence South 85 degrees 06 minutes 57 seconds East, along said Southerly right-of-way line, 1763 feet more or less to the Point of Beginning. Containing 126.4 acres more or less. Subject to 3rd Street North and 10th Avenue right-of-way easement and subject to any easements of record. Also subject to the following described easements:

SUBJECT, however, to all existing interests, including but not limited to all reservations, rights-of-way and easements of record or otherwise.

RESERVING, however, unto the Grantor, its successors and assigns, the right of ingress and egress at all times to the hereinabove described property for the purpose of performing soil tests, remedial or corrective clean up actions as may be required at any time on or within any portion of the above described property.

ALSO

RESERVING, however, unto said Grantor, its successors and assigns, and any designees a nonexclusive roadway easement and utility easement upon, over and across the hereinabove described premises for construction, maintenance and use of a roadway thereon for ingress and egress by the Grantor, its successors and assigns, and any designees, together with the Grantees, to and from adjacent property of the Grantor, described as follows:

MICROFILMED

Page 1 of 4

A 66-foot roadway and utility easement over, under and across that part of the Southeast Quarter of the Southeast Quarter (SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 8, Township 124 North, Range 28 West, in the City of Waite Park, Stearns County, Minnesota described as follows:

Commencing at the Southeast corner of said Section 8; thence North 90 degrees 00 minutes 00 seconds West, assumed bearing, 660.00 feet; to the Point of Beginning of the centerline of said 66-foot roadway and utility easement; thence North 00 degrees 00 minutes 00 seconds East 342.59 feet and there terminating. The side lines of said easement shall be prolonged or shortened to terminate at the property lines.

ALSO

RESERVING, however, unto said Grantor, its successors and assigns, easements to use said premises for pole and wire line or lines, together with all appurtenant fixtures necessary in connection therewith, whether in the present form and location or in such form and location as may hereafter be substituted therefor, together with the right, privilege and easements of ingress and egress to said premises for the purpose of constructing, maintaining, replacing, repairing, renewing and removing the same, as follows:

A 20-foot utility easement over, under and across that part of the Southwest Quarter of the Southwest Quarter (SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 9, Township 124 North, Range 28 West in the City of Waite Park, Stearns County, Minnesota described as follows:

Commencing at the Southwest corner of said Section 9; thence South 89 degrees 33 minutes 37 seconds East, assumed bearing, along the South line of said Section 9, a distance of 938.16 feet; thence North 08 degrees 12 minutes 25 seconds West 174.12 feet to the Point of Beginning of said 20-foot utility easement; said 20-foot easement lies South and contiguous to the following line; thence North 89 degrees 59 minutes 25 seconds West 800.00 feet and there terminating. The side lines of said easement shall be prolonged or shortened to terminate at property lines.

AND

A 30-foot utility easement over, under and across that part of the Southeast Quarter of the Southeast Quarter (SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 8; Township 124 North, Range 28 West, in the City of Waite Park, Stearns County, Minnesota described as follows:

Commencing at the Southeast corner of said Section 8; thence North 90 degrees 00 minutes 00 seconds West, assumed bearing, 627.00 feet; thence North 00 degrees 00 minutes 00 seconds East 262.57 feet to the Point of Beginning of the centerline of said 30-foot utility easement; thence South 79 degrees 10 minutes 27 seconds East 26.71 feet and there terminating. The side lines of said easement shall be prolonged or shortened to terminate at the property lines.

To have and to hold said hereinabove easements reserved so long as the same is used or required for such purposes and until all such facilities are removed from said premises with the intent to abandon said easements.

ALSO

EXCEPTING AND RESERVING, however, unto said Grantor, its successors and assigns, all of the coal, oil, gas, casinghead gas and all ores and minerals of every kind and nature underlying the surface of the premises herein conveyed, together with the full right, privilege and license at any and all times to explore, or drill for and to protect, conserve, mine, take, remove and market any and all such products in any manner which will not damage structures on the surface of the premises herein conveyed, together with the right of access at all times to exercise said rights.

Grantor agrees to indemnify the City of Waite Park for any and all reasonable costs incurred by the City of Waite Park for cleaning up contaminants, pollutants or hazardous wastes or hazardous substances which existed on the property described herein before the date of the transfer of this deed. It is the intention of the parties in this paragraph that in such event they

will consult with each other in an effort to reach agreement on the reasonableness of the clean up. Nothing in this paragraph shall be construed to relieve Burlington Northern of any of its obligations under Minnesota law to clean up contaminants, pollutants or hazardous substances on the property described herein which existed before the date of transfer of this deed.

Grantor and Grantee state that the acceptance of this deed by Waite Park is in no way intended as payment or satisfaction or compromise of whatever rights the City may have with relation to its water contamination problems against either Burlington Northern or any other responsible party.

Grantor agrees to proceed with the clean up of hazardous substances located on the property described herein within 12 months of the date of this deed.

Dated this 20th day of August, 1986.

BURLINGTON NORTHERN RAILROAD COMPANY

BY

Michael

ATTEST:

BY

J. J. [Signature]
Assistant Secretary

ACCEPTED:

CITY OF WAITE PARK

BY

Title:

ATTEST:

BY

Title:

STATE OF MINNESOTA

COUNTY OF STEARNS

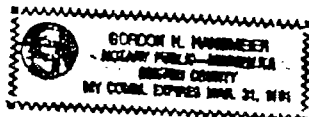
ss.

The foregoing instrument was acknowledged before me this 20th day of August, 1986, by Alvin J. Ringmuth, Mayor and Jeffrey Baird, Clerk of City of Waite Park, a municipal corporation, on behalf of the corporation.

Dorlon D. Hanson

Notary Public.

My commission expires: _____



STATE OF TEXAS
COUNTY OF TARRANT

The foregoing instrument was acknowledged before me this 20th day of August, 1986, by M. H. Karl, Asst. Secy and J. H. Harker, Assistant Secretary of Burlington Northern Railroad Company, Delaware corporation, on behalf of the corporation.

Frances Smith
Notary Public.

My commission expires: 6-29-88

FRANCES SMITH
Notary Public State of Texas
Commission Expires June 29, 1988

This instrument was drafted by
Sales and Property Management,
Burlington Northern Railroad Company
3300 Continental Plaza
777 Main Street
Fort Worth, TX 76102

State deed tax due hereon \$ 2.20

Tax statements for the real property
described in this instrument should be
sent to:

City of Waite Park
City Hall, P. O. Box 339
253 North 5th Avenue
Waite Park, MN 56387

Consideration for this transaction is \$1,000 or less.

OFFICE OF COUNTY RECORDER
STEARNS COUNTY, MINNESOTA

CERTIFIED, FILED AND/OR
RECORDED ON

1986 AUG 22 AM 10:01

AS DOC. #0602758
PATRICIA M. OVERMAN
COUNTY RECORDER

BY Patricia M. Overman DEPUTY

DTAX 2.20
0001 1000002 0001 9:47AM 8/22/86

BN 8289
QD 8

-4-

MICROFILMED
Page 4 of 4

NO DELINQUENT TAXES AND
TRANSFER ENTERED
AUG 22 1986

DATE

AUDITOR

DEPUTY

Affidavit, December 28, 1989

0662539

AFFIDAVIT

STATE OF Minnesota)
COUNTY OF Stearns) ss.

Johann Wagner, being first duly sworn, deposes and says:

1. I am an employee of ABB Power Distribution Inc.
2. I am making this affidavit based on information available to me and the belief that such information is accurate; however, I do not have firsthand knowledge of all the matters contained in this affidavit.
3. This affidavit is made pursuant to Minn. Stat. § 115B.16, Subd. 2.
4. ABB Power Distribution Inc. owns real estate in Stearns County, Minnesota, described in Exhibit A attached to this affidavit. Said real estate is referred to herein as "The Land".
5. The Land has allegedly been used to dispose of hazardous waste, and The Land is contaminated by release of a hazardous substance, according to assertions made by the Minnesota Pollution Control Agency.
6. The Land was used as the site of a plant consisting of a manufacturing facility which manufactured gas and steam turbines, electric generators and related equipment. The Land was used for this purpose from prior to 1975 until approximately 1983. The manufacturing processes occurring on

MICROFILMED
Page 1 of 2

The Land used solvents and generated waste solvents, which were allegedly spilled, dumped or otherwise released onto and into The Land. Such wastes would be characterized as hazardous wastes, but it has not been ascertained to what extent such wastes may have been released onto or into The Land.

7. Minn. Stat. § 115B.16, Subd. 2(c) purports to require a disclosure that the use of The Land or some portion of it may be restricted as provided in Minn. Stat. § 115B.16, Subd. 1, which applies to "disposal facilities".

FURTHER YOUR AFFIANT SAITH NOT.

Dated: December 28, 1989

Johann Wagner
Johann Wagner

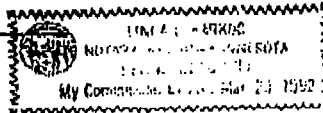
Subscribed and sworn to before me
this 19th day of December, 1989.

Linda H. Hult
Notary Public

Drafted By:

Page & Benson (RLR)
2200 Norwest Center
90 South Seventh Street
Minneapolis, MN 55402

1040x



MICROFILMED

Page 10/11

EXHIBIT A

That part of the Southeast Quarter (SE 1/4), of Section Numbered Eight (8), in Township Numbered One Hundred Twenty-four (124) North, of Range Numbered Twenty-eight (28) West, lying Westerly of First Addition to St. Cloud Industrial Park, and Northerly of the North right-of-way line of the Great Northern Railway Company, and Easterly of the following described line; Beginning at a point on said North right-of-way line of the Great Northern Railway Company, said point being 723 feet East of the West line of said Southeast Quarter (SE 1/4) of Section Eight (8) as measured at right angles thereto; thence North and parallel with said West line of said Southeast Quarter (SE 1/4) to its intersection with the North line of said Southeast Quarter (SE 1/4) of Section Eight (8) and there terminating.

RECEIVED COUNTY RECORDER
CERTIFIED FILED AND/OR
RECORDED ON
1980 JAN -3 PM 3:11
0669550
AS DOC. #
PATRICIA M. OVERMAN
COUNTY RECORDER
BY *[Signature]*

MICROFILMED
Page 11 of 12

Warranty Deed, December 14, 1989

MINNESOTA
General and Partnership
Corporation or Partnership

Minnesota Uniform Conveying Blanks (1978)

0668547

No delinquent taxes and transfer entered; Certificate
of Real Estate Value () filed () not required
Certificate of Real Estate Value No.

JAN - 3 1990, 19

County Auditor

by Nancy J. Hennig DeputySTATE DEED TAX DUE HEREON: \$ 9,322.50Date: December 31, 19 89

OFFICE OF COUNTY RECORDER

CERTIFIED TRUE AND CORRECT

1990 JAN -3 PM 3:16

0668547

AS AT -
PATRICIA J. OBERMAN
COUNTY RECORDER
BY Patricia J. Oberman Deputy

(reserved for recording data)

FOR VALUABLE CONSIDERATION, ABB Power Distribution Inc.
Delaware, a corporation under the laws of
Grantor, hereby conveys and warrants to M E International
general partnership under the laws of Minnesota, Grantee, a
partnership County, Minnesota, described as follows:

see Exhibit A attached hereto

DEED TAX \$ 2010390 7460
DEED TAX 134 9322.50
01/03/90 2 0 7460
CLERK 4 CSH TOS

(if more space is needed, continue on back)

together with all incidents and appurtenances belonging thereto, subject to the following exceptions:

see Exhibit B attached hereto

Affix Deed Tax Stamp Here

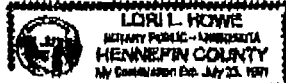
ABB POWER DISTRIBUTION INC.
By John J. Hennig
Its Executive Vice President
By _____
Its _____

STATE OF MINNESOTA

COUNTY OF Hennepin

The foregoing was acknowledged before me this 14th day of December, 19 89,
by John J. Hennig
the Executive Vice President
of ABB Power Distribution Inc., a corporation
under the laws of Delaware, on behalf of the corporation

NOTARIAL STAMP OR SEAL (OR OTHER TITLE OR NAME)



THIS INSTRUMENT WAS PREPARED BY (NAME AND ADDRESS):

FAEGRE & BENSON (RLR-LH)
2200 Northwest Center
90 South Seventh Street
Minneapolis, MN 55402-3901
(612) 336-3000

John J. Hennig
SIGNATURE OF PERSON TAKING ACKNOWLEDGMENT
The signatory for the real property described in this instrument should
be sent to include name and address of Recipient.

M E International
3901 University Ave. N.E.
Minneapolis, MN 55421

MICROFILMED
Page 1 of 2

EXHIBIT A

That part of the Southeast Quarter (SE 1/4), of Section Numbered Eight (8), in Township Numbered One Hundred Twenty-four (124) North, of Range Numbered Twenty-eight (28) West, lying Westerly of First Addition to St. Cloud Industrial Park, and Northerly of the North right-of-way line of the Great Northern Railway Company, and Easterly of the following described line: Beginning at a point on said North right-of-way line of the Great Northern Railway Company, said point being 723 feet East of the West line of said Southeast Quarter (SE 1/4) of Section Eight (8) as measured at right angles thereto; thence North and parallel with said West line of said Southeast Quarter (SE 1/4) to its intersection with the North line of said Southeast Quarter (SE 1/4) of Section Eight (8) and there terminating.

MICROFILMED
Page 2 of 2

Missing Page 3

Access Agreement, December 28, 1989

0669548**Access Agreement**

This Access Agreement is made and entered into this 28th day of December, 1989, by and between M E International ("Owners"), and ABB Power Distribution Inc. ("ABB").

Recitals

A. Owners own certain real property located in the City of St. Cloud, Minnesota, the street address of which is 711 Anderson Avenue, which is legally described on the attached Exhibit A. Said premises and any and all structures and improvements thereon will hereinafter be referred to as "The Property."

B. Prior to 1978, a manufacturing facility was operated on The Property which manufactured gas turbines, electric generators and related equipment. On or about January 1, 1978, Brown Boveri Turbomachinery, Inc. ("BBT") took possession of The Property and operated it until approximately 1983. During that period, BBT operated the plant and manufactured gas and steam turbines and electrical generators and related equipment. The manufacturing process of BBT and the prior owners used solvents and generated waste solvents.

C. The City of Waite Park, Minnesota owns and operates certain municipal water wells that are located a short distance from The Property. In January, 1985, said municipal wells were allegedly discovered to be contaminated. The wells were not used from or about February 4, 1985 until February 22, 1986.

MICROFILMED

Page 1 of 2

D. On October 22, 1985, the Minnesota Pollution Control Agency ("MPCA") issued a request for response action to the Burlington Northern Railroad Company, owner and operator of an adjacent site, pursuant to Minn. Stat. Chapter 115B.

E. On March 22, 1986, the MPCA issued a request for response action ("RFRA") to BBT and others. The MPCA alleged that, as a result the dumping of waste chlorinated solvents on The Property, the soil and ground water of The Property and the Waite Park municipal wells were contaminated. The RFRA required a remedial investigation/feasibility study and remedial action to determine and correct the full extent of soil and ground water contamination on The Property and to provide Waite Park with an uncontaminated municipal water supply.

F. ABB as successor in interest to BBT, has undertaken certain activities in compliance with the RFRA, and intends to respond further to the RFRA.

G. The purpose of this Access Agreement is to grant ABB access to The Property, under the terms and conditions contained herein, in order to permit ABB to respond to the RFRA.

H. In entering into this Access Agreement, Owners and ABB, and each of them, expressly deny liability under CERCLA, ERLA or any other law, to each other or to any third person (including the U.S. Environmental Protection Agency ("EPA") and MPCA).

NOW, THEREFORE, in consideration of the foregoing and the mutual promises hereinafter set forth, and for other good and

valuable consideration the receipt and sufficiency of which are hereby acknowledged, OWNERS and ABB HEREBY AGREE AS FOLLOWS:

1. Owners, and each of them, hereby give their consent and authorize (a) ABB; (b) the MPCA; and (c) the authorized employees, contractors or agents of the MPCA and ABB (collectively referred to as "authorized persons"), to enter The Property for the purpose of responding to the RFRA, including, but not limited to, (1) testing, transporting, sealing, treating or disposing of, and performing all acts incidental to testing, transporting, sealing, treating or disposing of, any waste materials located at The Property; (2) making any modifications to The Property which are necessary in order to safely and efficiently respond to the RFRA; (3) using or installing at ABB's expense necessary utility hook-ups including, but not limited to, telephone and electric services; (4) inspecting The Property and reviewing the progress of the work; and (5) preparing for and performing soil and groundwater investigations, including but not limited to installation of treatment systems, at and in the vicinity of The Property. This Access Agreement is entered into without prejudice to the rights of the MPCA and ABB to seek amendments to this Access Agreement or to seek any additional access for any other lawful purpose.

2. Owners shall be liable to ABB for all damages and repair costs incurred as a result of damage to monitoring wells (including structures appurtenant thereto), and all other

facilities, improvements, fixtures and other personal property installed in, under or upon, and work performed upon, The Property pursuant to the RFRA, whether caused (a) by the conduct of any business, (b) by the demolition of existing buildings, (c) by the construction of new buildings, or (d) by the action or inaction of any person, firm or entity having a right of ownership or possession of The Property or any portion thereof; provided, however, that Owners shall not be liable for such damage caused by ABB, its employees or agents.

3. Owners hereby waive and release any and all claims which may arise against ABB or its employees and agents as a result of any and all activities associated with the RFRA, other than claims for personal injury or property damage caused by the negligence of ABB or its employees and agents. In particular, but without limiting the generality of the foregoing, Owners agree to waive and release any claim that the actions of ABB or its employees and agents in responding to the RFRA interfered with or in any way damaged Owners, or the business or business opportunities of Owners.

4. ABB agrees that all contractors and subcontractors performing any activities pursuant to this Access Agreement will be insured pursuant to a policy or policies of comprehensive or general liability insurance with minimum limits of \$300,000 per occurrence.

5. Except in an emergency, ABB agrees to give Owners reasonable notice of when ABB or other authorized persons will require access to The Property. ABB or other authorized persons shall enter at reasonable times and shall use reasonable efforts to minimize any material disruption or interruption of the conduct of Owners' business. Owners agree not to obstruct or interfere with any work or other activity undertaken pursuant to the RFRA. ABB shall, after completion of any action taken on The Property, in a reasonable, cost-effective manner, restore The Property to a condition functionally similar to that which existed prior to such action.

6. Owners warrant and represent that they are the sole fee owners of The Property and that to the best of their knowledge the consent of no other person is required to accomplish the purposes of this Access Agreement. Owners agree not to sell, convey or otherwise grant to any person any interest in The Property for such period of time as this Access Agreement remains in effect, unless such sale, conveyance or grant of interest is made subject to this Access Agreement.

7. This Access Agreement shall become effective on the date the last necessary signature is affixed hereto and shall remain in effect until written notice is sent to Owners by ABB that the RFRA has been completely implemented and that all related activities have been completed.

8. Owners hereby acknowledge that this Access Agreement is entered into voluntarily and without coercion. Owners represent that they have full authority to enter into this Access Agreement and that no other signatures are necessary to bind all those having an interest in The Property.

9. This Access Agreement is binding upon and shall inure to the benefit of the heirs, successors, and assigns of Owners and ABB, and each of them.

IN WITNESS WHEREOF, the parties have executed this Access Agreement on and as of the date first above written.

DATED: December 28, 1989.

ABB POWER DISTRIBUTION INC.

By [Signature]
Its Executive Vice President

M E INTERNATIONAL

By [Signature]
Its President

STATE OF Minnesota)
COUNTY OF Hennepin) ss.

On this 4th day of December, 1989, before me a Notary Public within and for said county, personally appeared Johann Wagner, the Exec Vice President of ABB Power Distribution Inc., to me known to be the person described in and who executed the foregoing instrument and acknowledged that he read the same and executed it as his free act and deed.

Linda L. Karkoc
Notary Public
LINDA L. KARKOC
NOTARY PUBLIC - MINNESOTA
HENNEPIN COUNTY
My Commission Expires Mar 25, 1992

STATE OF Minnesota)
COUNTY OF Hennepin) ss.

On this 4th day of December, 1989, before me a Notary Public within and for said county, personally appeared John Bertel, the President of M E International, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he read the same and executed it as his free act and deed.

Ellen W. McVeigh
Notary Public

Drafted By:

Faegre & Benson (RLR)
2200 Norwest Center
90 South Seventh Street
Minneapolis, MN 55402

0090x

ELLEN W. McVEIGH
NOTARY PUBLIC - MINNESOTA
HENNEPIN COUNTY
My Commission Expires Nov 12, 1991

MICROFILMED
Page 7 of 8

EXHIBIT A

That part of the Southeast Quarter (SE 1/4), of Section Numbered Eight (8), in Township Numbered One Hundred Twenty-four (124) North, of Range Numbered Twenty-eight (28) West, lying Westerly of First Addition to St. Cloud Industrial Park, and Northerly of the North right-of-way line of the Great Northern Railway Company, and Easterly of the following described line: Beginning at a point on said North right-of-way line of the Great Northern Railway Company, said point being 723 feet East of the West line of said Southeast Quarter (SE 1/4) of Section Eight (8) as measured at right angles thereto; thence North and parallel with said West line of said Southeast Quarter (SE 1/4) to its intersection with the North line of said Southeast Quarter (SE 1/4) of Section Eight (8) and there terminating.

OFFICE OF COUNTY RECORDER
STEARNS COUNTY, MINNESOTACERTIFIED FILED AND/OR
RECORDED ON

JAN -3 PM 3:16

0669548

AS DOC #
PATRICIA M. OVERMAN
COUNTY RECORDERBY: *Patricia M. Overman* DEPUTY

MICROFILMED

Page 2 of 8

Warranty Deed, September 13, 1995

803663

No additional taxes and transfer entered: Certificate of Real Estate Value () filed () not required

Certificate of Real Estate Value No. _____ 19____

[Signature]
County Auditor

by *[Signature]* Deputy

STATE DEED TAX DUE HEREON: \$ 16597.35

Date: September 15, 1995

803663

95 SEP 20 PM 1:58

COUNTY RECORDER
STEARNS CO. MN
PATRICIA M. OVERMAN
by *[Signature]* Deputy

(reserved for recording data)

FOR VALUABLE CONSIDERATION, M E International, Inc. a corporation under the laws of Michigan, Grantor, hereby conveys and warrants to Grede-St. Cloud, Inc. a corporation under the laws of Minnesota, real property in Stearns County, Minnesota, described as follows:

See Exhibit I attached hereto and incorporated herein.

950018036 9/20/1995
DEED TX 13:18:36
P A I D
\$16,597.35



(If more space is needed, continue on back)

together with all hereditaments and appurtenances belonging thereto, subject to the following exceptions:

See Exhibit II attached hereto and incorporated herein.

Affix Used Tax Stamp Here

M E INTERNATIONAL, INC.

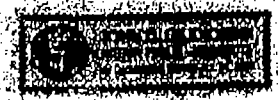
By *[Signature]*
TIMOTHY M. WILSON, PRESIDENT

By _____
ITA

STATE OF MINNESOTA
COUNTY OF HENNEPIN

The foregoing was acknowledged before me this 13th day of September, 1995, by Timothy M. Wilson, President of M E International, Inc. a corporation under the laws of Michigan, on behalf of the corporation.

WITNESSED my hand and official seal this 13th day of September, 1995.



[Signature]
SIGNATURE OF PERSON MAKING ACKNOWLEDGMENT

The Signatures for the Real Property described in this instrument should be same to Grantor Name and (Address of Grantor)

Grede-St. Cloud, Inc.

c/o Grede Foundations, Inc.
4846 W. Bluemound Road
Milwaukee, WI 53226

RECORDED
INDEXED

THIS INSTRUMENT WAS PREPARED BY (NAME AND ADDRESS):
Gray, Plant, Hooty, Monty
& Barnett
4400 City Center
33 South Sixth Street
Minneapolis, Minnesota 55402

EXHIBIT B - LEGAL DESCRIPTION

Tract I:

That part of the Northwest Quarter of the Southeast Quarter and that part of the Southwest Quarter of the Northeast Quarter all in Section 28, Township 125 North, Range 28 West, City of Sartell, Stearns County, Minnesota described as follows: Commencing at the southeast corner of the Northeast Quarter of the Southwest Quarter; thence North 89 degrees 42 minutes 59 seconds West, assumed bearing, along the south line of the said Northeast Quarter of the Southwest Quarter, a distance of 1016.37 feet to the southeast corner of a parcel of land described in Document Number 371403; thence North 89 degrees 42 minutes 30 seconds West along the east line of said parcel described in Document Number 371403, a distance of 280.01 feet; thence South 89 degrees 42 minutes 59 seconds East, parallel with the south line of said Northeast Quarter of the Southwest Quarter, a distance of 1036.35 feet to the east line of the said Northeast Quarter of the Southwest Quarter; thence South 89 degrees 12 minutes 01 second East, parallel with the south line of the said Northeast Quarter of the Southwest Quarter, a distance of 127.34 feet to the actual point of beginning; thence continue South 89 degrees 12 minutes 01 second East, a distance of 563.61 feet to the west line of SARTELL INDUSTRIAL PARK, a duly recorded plat, on file and of record in the Office of the County Recorder, Stearns County, Minnesota; thence North

00 degrees 31 minutes 34 seconds East, along the said west line, a distance of 1047.31 feet to the southeast corner of Lot 6, Block 3, said SARTELL INDUSTRIAL PARK; thence North 89 degrees 22 minutes 43 seconds West, along the south line of said SARTELL INDUSTRIAL PARK, a distance of 568.86 feet; thence South 00 degrees 28 minutes 07 seconds West a distance of 1083.56 feet to the point of beginning. Containing 13.589 acres, more or less. Together with an ingress and egress and utility easement as described in document Number 0553806. Also subject to easements of record.

Subject to and together with a perpetual easement for ingress and egress and utility purposes over, under and across the following:

- a. The north 30.00 feet of the said Northwest Quarter of the Southeast Quarter lying west of said SARTELL INDUSTRIAL PARK and that part of the said Southwest Quarter of the Northeast Quarter lying southerly of and westerly of said SARTELL INDUSTRIAL PARK;
- b. The west 20.00 feet of Lots 3, 4, and 5, Block 3. The West 20.00 feet except the North 50.00 feet thereof of Lot 2. The South 20.00 feet of the North 70.00 feet of Lot 2, and the East 30.00 feet except the North 50.00 feet thereof, Lot 2, all in Block 3, together with that part of vacated 4th Avenue South and that part of vacated Industrial Drive lying adjacent to and 20.00 feet Easterly of that part of vacated 4th Avenue South, and lying adjacent to and 20.00 feet Southerly and Westerly of that part of vacated Industrial Drive, which accrued to Lot 1, Block 3 as a result of these certain street vacations dated October 15, 1985 and recorded as Document No. 058821, in the office of the County Recorder, Stearns County, Minnesota. All in said plat of Sartell Industrial Park.
- c. The West 20 feet of that part of the NW 1/4 lying southerly of the plat of Sartell Industrial Park, and also over, under, and across the North 30 feet of the West 145.54 feet of the NW 1/4 of the SE 1/4 all in Section 28, Township 125, Range 28.

MICROFILMED

PAGE 2 of 3

together with all hereditaments and appurtenances belonging thereto.

Tract II:

Lots 3 and 4, Block 1, Foundry Addition according to the recorded plat thereof.

Exhibit II - Permitted Exceptions

Tract II

Any matters disclosed by the survey dated November 9, 1990, prepared by Williamson-Kosmith, Inc.

Tract II

- 1) Easements shown on the recon'd plat of Foundry Addition.
- 2) Any matter disclosed by the survey dated December 4, 1989, prepared by Otto Associates Land Surveyors.
- 3) Unrecorded Industrial Truck Agreement dated April 10, 1972, between Burlington Northern, Inc. and Electric Machinery Manufacturing Company, as amended by a Supplemental Agreement dated September 15, 1989, between Burlington.
- 4) Agreement dated July 23, 1970 recorded November 10, 1970 in Book 52 of A&A page 245.
- 5) Utility Easement dated November 7, 1974 recorded November 27, 1974 in Book 61 of A&A page 487.
- 6) Access Agreement between ABB Power Distribution Inc., and ME International dated December 28, 1989 recorded January 3, 1990 as Document No. 669548.
- 7) Affidavit by Johann Wagner, employee of ABB Power Distribution Inc., dated December 14, 1989, recorded January 3, 1990 as Document No. 669550.
- 8) Overhead Power Line along the Southerly side of above described land as shown upon the Survey dated July 28, 1989 and revised December 4, 1989 made by Otto Associates Land Surveyors.
- 9) Electric Distribution Easement to Northern States Power Company dated January 5, 1990 recorded January 10, 1990 as Document No. 670021.
- 10) Easement Agreement recorded February 8, 1991 as Document No. 691031.
- 11) Subdivision Agreement dated 1/11/95 between the City of St. Cloud and ME International, Inc., a Michigan corporation, recorded as Document No. 802940.

QR-217871 v1

MICROFILMED

PAGE 3

Quit Claim Deed, March 27, 1997

QUIT CLAIM DEED

Corporation to Corporation

No delinquent taxes and transfer entered; Certificate of Real Estate Value () filed (X) not required. Certificate of Real Estate Value No. _____

JUN 26 1997



County Auditor

by



848214

JUN 26 PM 12:46

COUNTY RECORDER
STEARNS CO. MN
PATRICIA M. OVERMAN

24 *Patricia M. Overman* DEPUTY

STATE DEED TAX DUE HEREON \$1.65

Date: March 20, 1997

FOR VALUABLE CONSIDERATION, City of Waite Park, a municipal corporation under the laws of the State of Minnesota, Grantor, hereby conveys and quitclaims to The Burlington Northern and Santa Fe Railway Company, a corporation under the laws of the State of Delaware, Grantee, real property in Stearns County, Minnesota, described as follows:

That part of the South Half of the Southeast Quarter (S $\frac{1}{2}$ SE $\frac{1}{4}$) of Section 8, Township 124 North, Range 28 West, in the City of Waite Park, Stearns County, Minnesota, described as follows:

Commencing at the southwest corner of Section 9; thence South 89 degrees 33 minutes 37 seconds East, assumed bearing, along the south line of said Section 9, a distance of 938.16 feet; thence North 08 degrees 12 minutes 25 seconds West 174.12 feet; thence North 89 degrees 59 minutes 25 seconds West 1514.10 feet; thence North 00 degrees 02 minutes 05 seconds East 177.16 feet; thence North 89 degrees 57 minutes 55 seconds West 183.34 feet; thence North 00 degrees 02 minutes 05 seconds East 97.30 feet; thence South 89 degrees 57 minutes 55 seconds East 113.34 feet; thence North 00 degrees 02 minutes 05 seconds East 467.56 feet to the point of beginning; thence South 89 degrees 57 minutes 55 seconds East 565.00 feet; thence North 00 degrees 02 minutes 05 seconds East 134.20 feet to the southerly right-of-way line of Burlington Northern Railroad; thence South 87 degrees 16 minutes 55 seconds West, along said right-of-way, 193.05 feet; thence westerly,

MICROFILMED

Page 1 of 3

along said right-of-way line, a distance of 372.28 feet along a tangential curve concave to the north having a radius of 5729.72 feet and a central angle of 03 degrees 43 minutes . 22 seconds; thence South 00 degrees 02 minutes 05 seconds West along a line not tangent to said curve, 119.14 feet to the point of beginning,

together with all hereditaments and appurtenances belonging thereto.

RESERVING to the Grantor a 42.00 foot utility, ingress and egress easement over, under and across the north 42.00 feet of the parcel described above, only for so long as same shall be used for utility, ingress and egress purposes.

RESERVING to the Grantor a 44.00 foot roadway and utility easement over, under and across the west 44.00 feet of the parcel described above, only for so long as same shall be used for roadway and utility purposes.

SUBJECT to the following reservations and restrictions of record:

1. Rights reserved to Burlington Northern Railroad Co. in Quit Claim Deed dated August 20, 1986, as Document No. 602758.
2. Affidavit of Thomas J. Patnode filed of record August 22, 1986, as Document No. 602757.

The sale price or other consideration given for this property is \$500 or less.

The Seller certifies that the Seller does not know of any wells on the described real property.

CITY OF WAITE PARK

By: 

Richard Miller

Its Mayor

By: 

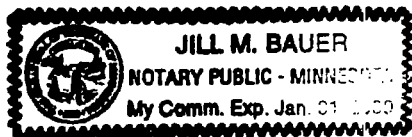
Jeffrey J. Baird

Its City Clerk/Treasurer

STATE OF MINNESOTA)
) SS.
COUNTY OF STEARNS)

The foregoing instrument was acknowledged before me this 30th
day of March, 1997, by Richard Miller and Jeffrey J.
Baird, the Mayor and City Clerk/Treasurer, respectively, of the City
of Waite Park, a municipal corporation under the laws of the State of
Minnesota, on behalf of said corporation.

NOTARIAL STAMP



Jill M. Bauer
Signature of person taking
acknowledgment

Tax statements for the real properly
described in this instrument should
be sent to:

~~Box 100 North Lexington Railroad~~
~~4105 North Lexington Avenue~~
~~Arden Hills, MN 55126~~

THIS INSTRUMENT WAS DRAFTED BY:

✓ Gordon H. Hansmeier - 40770
Rajkowski Hansmeier Ltd.
11 Seventh Avenue North
P.O. Box 1433
St. Cloud, MN 56302
Telephone: (320) 251-1055

Catellus Management Corporation
Suite 100
4545 Fuller Drive
Irving, TX 75038

n:\city\waite2\ac031797.701

27
TRES99

970018203
DEED TX *
PAID
\$1.65

6/26/1997
9:45:17

Affidavit of Richard Miller, March 20, 1997

AFFIDAVIT

STATE OF MINNESOTA)
) SS.
 COUNTY OF STEARNS)

Richard Miller, being first duly sworn, on oath deposes and states as follows:

1. That he is the Mayor of the City of Waite Park, a municipal corporation under the laws of the State of Minnesota.

2. That in his capacity as Mayor of the City of Waite Park, he is aware of certain hazardous substances and contaminants located on the premises legally described as follows:

That part of the South Half of the Southeast Quarter (S $\frac{1}{2}$ SE $\frac{1}{4}$) of Section 8, Township 124 North, Range 28 West, in the City of Waite Park, Stearns County, Minnesota, described as follows:

Commencing at the southwest corner of Section 9; thence South 89 degrees 33 minutes 37 seconds East, assumed bearing, along the south line of said Section 9, a distance of 938.16 feet; thence North 08 degrees 12 minutes 25 seconds West 174.12 feet; thence North 89 degrees 59 minutes 25 seconds West 1514.10 feet; thence North 00 degrees 02 minutes 05 seconds East 177.16 feet; thence North 89 degrees 57 minutes 55 seconds West 183.34 feet; thence North 00 degrees 02 minutes 05 seconds East 97.30 feet; thence South 89 degrees 57 minutes 55 seconds East 113.34 feet; thence North 00 degrees 02 minutes 05 seconds East 467.56 feet to the point of beginning; thence South 89 degrees 57 minutes 55 seconds East 565.00 feet; thence North 00 degrees 02 minutes 05 seconds East 134.20 feet to the southerly right-of-way line of Burlington Northern Railroad; thence South 87 degrees 16 minutes 55 seconds West, along said right-of-way, 193.05 feet; thence westerly, along said right-of-way line, a distance of 372.28 feet along a tangential curve concave to the north having a radius of 5729.72 feet and a central angle of 03 degrees 43 minutes 22 seconds; thence South 00 degrees 02 minutes 05 seconds West along a line not tangent to said curve, 119.14 feet to the point of beginning.

Reserving to the Grantor a 42.00 foot utility, ingress and egress easement over, under and across the north 42.00 feet of the parcel described above.


Also reserving a 44.00 foot roadway and utility easement over, under and across the west 44.00 feet of the parcel described above.

Both reserved easements referred to above run with the land.

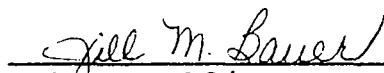
3. That the soil contaminants for the containment cell on the property legally described above are listed on Exhibit A attached hereto.

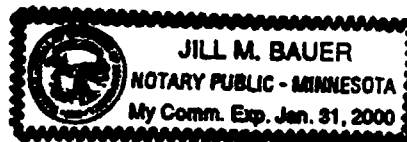
4. That this Affidavit is given pursuant to Minn. Stat. § 115B.16.

FURTHER YOUR AFFIANT SAITH NOT.


Richard Miller

Subscribed and sworn to before
me this 20th day of March, 1997.


Notary Public



THIS INSTRUMENT DRAFTED BY:

RAJKOWSKI HANSMEIER LTD.
Gordon H. Hansmeier - 40770
11 Seventh Avenue North
P.O. Box 1433
St. Cloud, MN 56302-1433
(320) 251-1055

n:\city\waite2\aw\031797.702

Table 4

7/12/94

Soil Contaminants of Concern
Treated Soil Remediation Levels
for Containment Cell
Burlington Northern Car Shop Site
Waite Park, Minnesota

Matrix/Compound	Remediation Level mg/l	Confirmation Sampling Methods
Metals		
Arsenic (c)	5.0	EPA 1311/EPA1312
Cadmium	1.0	EPA 1311/EPA1312
Lead	5.0	EPA 1311/EPA1312
Semi-Volatile Organic Compounds (SVOCs)		
Anthracene	NGA	EPA 1311/8270
Benzo(ghi)perylene	NGA	EPA 1311/8270
Fluoranthene	NGA	EPA 1311/8270
Fluorene	NGA	EPA 1311/8270
Naphthalene	NGA	EPA 1311/8270
Phenanthrene	NGA	EPA 1311/8270
Pyrene	NGA	EPA 1311/8270
total nPAHs	NGA	EPA 1311/8270 mod
total cPAHs (c)	NGA	EPA 1311/8270 mod
Polychlorinated Biphenols (PCBs)		
PCBs, total (c)	50.0 mg/kg	8080

EPA 1311, TCLP = Toxicity Characteristic Leaching Procedure

EPA 1312 = Synthetic precipitation leach test for soils

(c) = carcinogenic

NGA = No Goal Assigned. A goal was not assigned at this time due to lack of analysis.

A goal may be assigned based on the results of confirmation sampling.

848215

97 JUN 26 PM 12:46

COUNTY RECORDER
STEARNS CO. MN
PATRICIA M. OVERMAN
7/12/94

EXHIBIT

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3 of 3
Page

Easement and Declaration of Restrictions and Covenants, May 6, 1997

EASEMENT AND DECLARATION OF RESTRICTIONS AND COVENANTS

THIS EASEMENT AND DECLARATION is made this 6 day of May, 1997,
by the city of Waite Park.

WITNESSETH:

WHEREAS, the city of Waite Park, a political subdivision and municipal corporation of the state of Minnesota, is the fee owner of certain real property located in Stearns County, Minnesota, as described herein (the "Property"); and

WHEREAS, the Property is the location of release(s) of certain hazardous substances or pollutants and contaminants as defined by Minn. Stat. § 115B.02 and is part of a site known as the Burlington Northern Car Shop - Waite Park Superfund site (the "Site") which is listed on the State Permanent List of Priorities under Minn. Stat. § 115B.17, subd. 13 and the National Priority List under 42 U.S.C. § 9605; and

WHEREAS, the Minnesota Pollution Control Agency ("MPCA") issued a Request for Response Action regarding the Site pursuant to Minn. Stat. § 115B.17 on October 22, 1985, to the Burlington Northern Railroad Company (BN); and

WHEREAS, the MPCA has approved and intends to approve response actions that are reasonable and necessary to protect public health and the environment from releases at or from the Site; and

WHEREAS, the city of Waite Park has acquired a portion of the Site from BN and has agreed to place the Easement and Declaration of Restrictions and Covenants (Easement and Declaration) on the Property that it owns and which is hereinafter described to assure that response actions implemented at the Site continue to protect public health and the environment.

NOW, THEREFORE, pursuant to authority vested in the city of Waite Park by Minn. Stat. § 412.211 and (action or resolution) of the City Council on May 6, 1997, the city of

Waite Park ("Grantor") makes the following grant of easement and declaration as to limitations, restrictions and uses to which Property may be put:

1. Property.

As used herein, "Property" shall be the real property owned by the Grantor located in Stearns County, Minnesota, depicted and legally described on Exhibit 1 which is incorporated in this Easement and Declaration.

2. Purpose of Restrictions.

On the effective date of this Easement and Declaration, certain response actions have been implemented at the Property and other response actions remain to be implemented. Cleanup standards for soil and contaminants of concern for groundwater, presented in Exhibit 2, set by the MPCA in the July 14, 1996, Record of Decision for the Property assume that future uses of the Property are limited to assure continued protection of public health and the environment.

3. Use Restrictions.

Subject to the terms and conditions of this Easement and Declaration and the reservation and covenants contained herein, the Grantor hereby declares and imposes the following restrictions ("Restrictions") on the use of the Property as follows:

(a) Use of the Property shall be limited to commercial and industrial use consistent with protection of public health and the environment from releases of hazardous substances or pollutants or contaminants at the Property. The following uses of the Property are not allowed: day care centers; any form of educational facility; churches; social centers; hospitals; elder care facilities; nursing homes; recreational; and single family or multiple family dwellings.

(b) There shall be no extraction of ground water or excavation below the ground water table on the Property for any purpose without the prior written approval of the Commissioner of

the MPCA or his successor (the "Commissioner"). The Commissioner's approval may include conditions which the Commissioner deems reasonable and necessary to protect public health or the environment, and shall not be unreasonably withheld. The ground water may be impacted by volatile organic compounds, polychlorinated biphenols and polynuclear aromatic hydrocarbons as specified in Exhibit 2. The MPCA is currently overseeing BN's ground water investigation and remediation activities.

(c) The following requirements must be followed regarding soils in each of the three areas of the Property as defined below:

(1) Area 1. Soil in Area 1 is believed to meet the MPCA soil cleanup standards for the commercial and industrial uses allowed under this Easement and Declaration. However, this soil may not be acceptable as clean fill off-site. Therefore, soil excavated from Area 1 on the Property shall not be removed from the Property or, if removed, shall be removed and disposed of in accordance with a Contingency Plan approved by the Commissioner. Area 1 comprises all portions of the Property not contained in Areas 2 and 3 as defined below.

(2) Area 2. Several portions of the Property exhibit soil contamination but meet the MPCA soil cleanup standards for commercial and industrial use. The location of these soils are collectively defined as Area 2, which is depicted in Exhibit 3 and 4. Any soil excavated in Area 2 shall be replaced in the excavation, used as fill on the Property, or, if removed, shall be removed and disposed of in accordance with a Contingency Plan approved by the Commissioner. Soil excavated in Area 2 and used as fill on the Property shall be covered with clean soil and vegetated or shall be buried under parking lots. The location of any Area 2 soil used as fill shall be surveyed and a copy of the survey provided to the MPCA.

(3) Area 3. Area 3 contains soil that exceeds the MPCA soil cleanup standards (Exhibit 2) and is currently being addressed by BN with the MPCA's oversight. Prior to BN's completion of response actions in this area there shall be no disturbance or alteration on, above, or beneath Area 3 of any nature whatsoever, specifically including, but not limited to, grading, excavation, boring, drilling or construction without the prior written approval of the Commissioner. Area 3 is that portion of the Property located within 150 feet radius of Test Trench 3 (TT3), as depicted in Exhibit 4 and 4a.

The Commissioner's approval of any proposed actions or contingency plans may include conditions which the Commissioner deems reasonable and necessary to protect public health or the environment, and shall not be unreasonably withheld.

4. Covenants.

The Grantor hereby covenants that the Property shall not be held, transferred, sold, conveyed, occupied, altered, or used in violation of the Restrictions set forth in Section 3 of this Easement and Declaration.

5. Reservations.

Nothing contained in this Easement and Declaration shall in any way prohibit, restrict or limit the Grantor from fully conveying, transferring, occupying or using the Property for all purposes not inconsistent with the Restrictions.

6. Grant and Conveyance to MPCA: Right of Entry.

Subject to the terms and conditions of this Easement and Declaration, the Grantor hereby grants and conveys to the MPCA and its successors, MPCA's employees, contractors and agents, the right to enter the Property to take or oversee implementation of reasonable and necessary response actions on the Property pursuant to Minn. Stat. §§ 115B.01 to 115B.18 and to enforce and verify compliance with the Restrictions set forth in Section 3 of this Easement and

Declaration. The Commissioner agrees that in exercising this right, the Commissioner shall provide reasonable notice to the then-current owner, enter at reasonable times, and to avoid unreasonable interference with any uses of the Property that are in compliance with the Restrictions.

7. Amendment.

This Easement and Declaration and the covenants, grants and Restrictions herein continue until terminated, modified released and/or amended with the written consent of the Commissioner or his successor, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Easement and Declaration and the covenants, grants and Restrictions set forth herein may be terminated, modified, released and/or amended upon the occurrence and satisfaction of the following conditions:

(a) soil or ground water sampling is conducted on the Property with prior written notice to and in accordance with a plan approved by the MPCA, such approval not to be unreasonably withheld; and

(b) based on such samples the MPCA determines that the soil/ground water/surface waters no longer pose a potential threat to human health and that disturbance of such soil or ground water will not hinder any biodegradation of any remaining contamination.

In the event of a termination, modification, release and/or amendment of this Easement and Declaration, the Commissioner, within 60 days after receipt of written request from the owner of the Property, shall execute an instrument in recordable form, terminating, releasing, modifying and/or amending this Easement and Declaration.

8. Binding Effect.

The Restrictions declared and the rights and interest granted under this Easement and Declaration shall run with the Property and bind the Grantor, its successors or assigns, all present

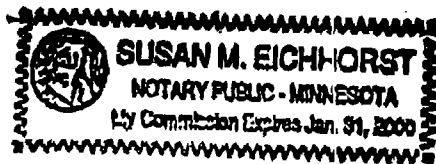
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Accepted on behalf of
Minnesota Pollution Control Agency

By: Peder A. Larson
Peder A. Larson
Commissioner

STATE OF MINNESOTA)
)SS.
COUNTY OF RAMSEY)

The foregoing instrument was acknowledged before me this 12 day of May,
1997, by Peder A. Larson, the Commissioner of Minnesota Pollution Control Agency, a
Minnesota body politic, on behalf of the State of Minnesota.



Susan M. Eichhorst
Notary Public

This document drafted by:

Alan C. William
Assistant Attorney General
900 NCL Tower
445 Minnesota Street
St. Paul, Minnesota 55101
(612) 296-7200

Attachments

Exhibit 1. Figure of Property and Land Description

Exhibit 2. Table 1: Soil Contaminants of Concern and Soil Remediation Levels;

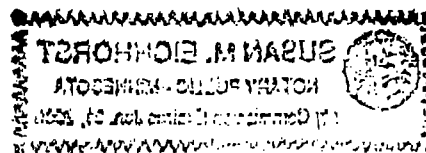
Table 2: Ground Water Contaminants of Concern and Ground Water Monitoring
Requirements.

Table 1 and 2 from July 14, 1996, Record of Decision

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Exhibit 3. Impacted Soil. January 10, 1997, Braun Intertec figure depicting sulfur soils; completed boundaries for Area C lagoon excavations - soil impacted with CaOH, PCBs and Lead may exist along the utility corridor on the northern boundary of Area C lagoon excavation; and Area B Pond.

Exhibit 4 and 4a. August 8, 1996, and March 26, 1997, Remediation Technologies Inc. figure depicting Impacted Soil and Restricted Area



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Attachments

Exhibit 1. Figure of Property and Land Description

Exhibit 2. Table 1: Soil Contaminants of Concern and Soil Remediation Levels;

Table 2: Ground Water Contaminants of Concern and Ground Water Monitoring Requirements.

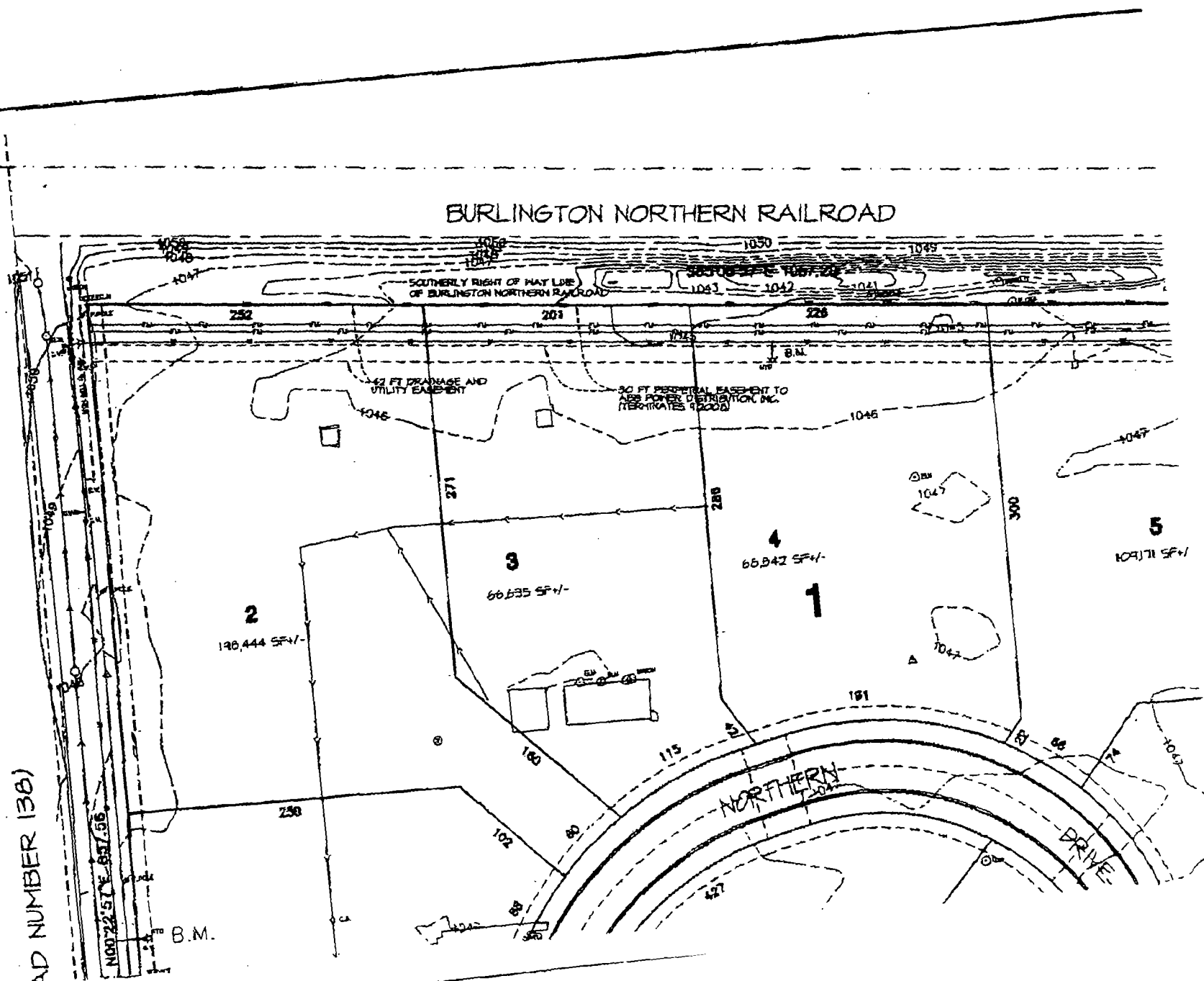
Table 1 and 2 from July 14, 1996 Record of Decision

Exhibit 3. Impacted Soil. January 10, 1997 Braun Intertec figure depicting sulfur soils;

completed boundaries for Area C lagoon excavations - soil impacted with CaOH, PCBs and Lead may exist along the utility corridor on the northern boundary of Area C lagoon excavation; and Area B Pond.

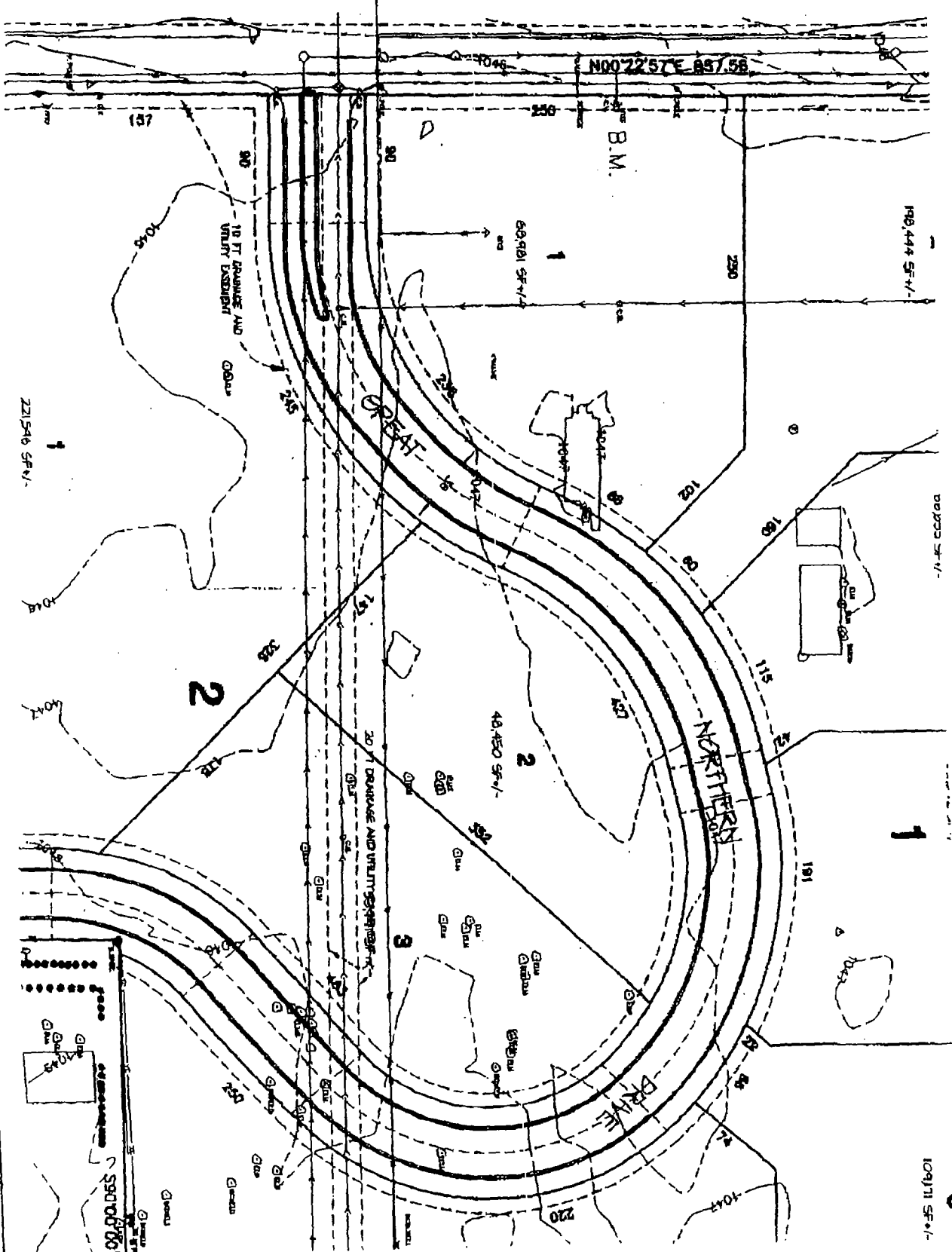
Exhibit 4 and 4a. August 8, 1996 and March 26, 1997 Remediation Technologies Inc. figure depicting Impacted Soil and Restricted Area

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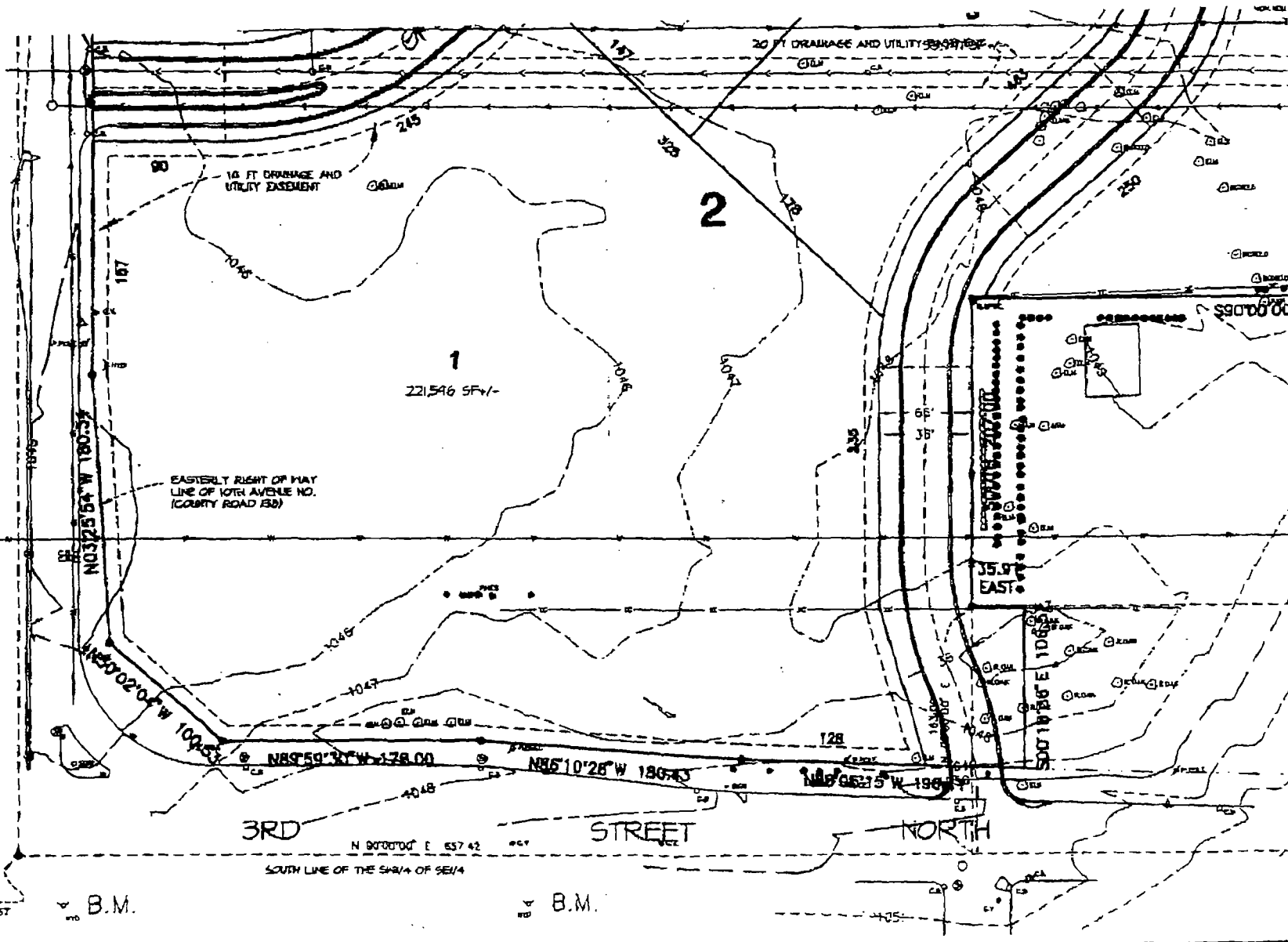


10TH AVENUE NORTH

(COUNTY ROAD NUMBER 138)



10TH AVENUE NORTH



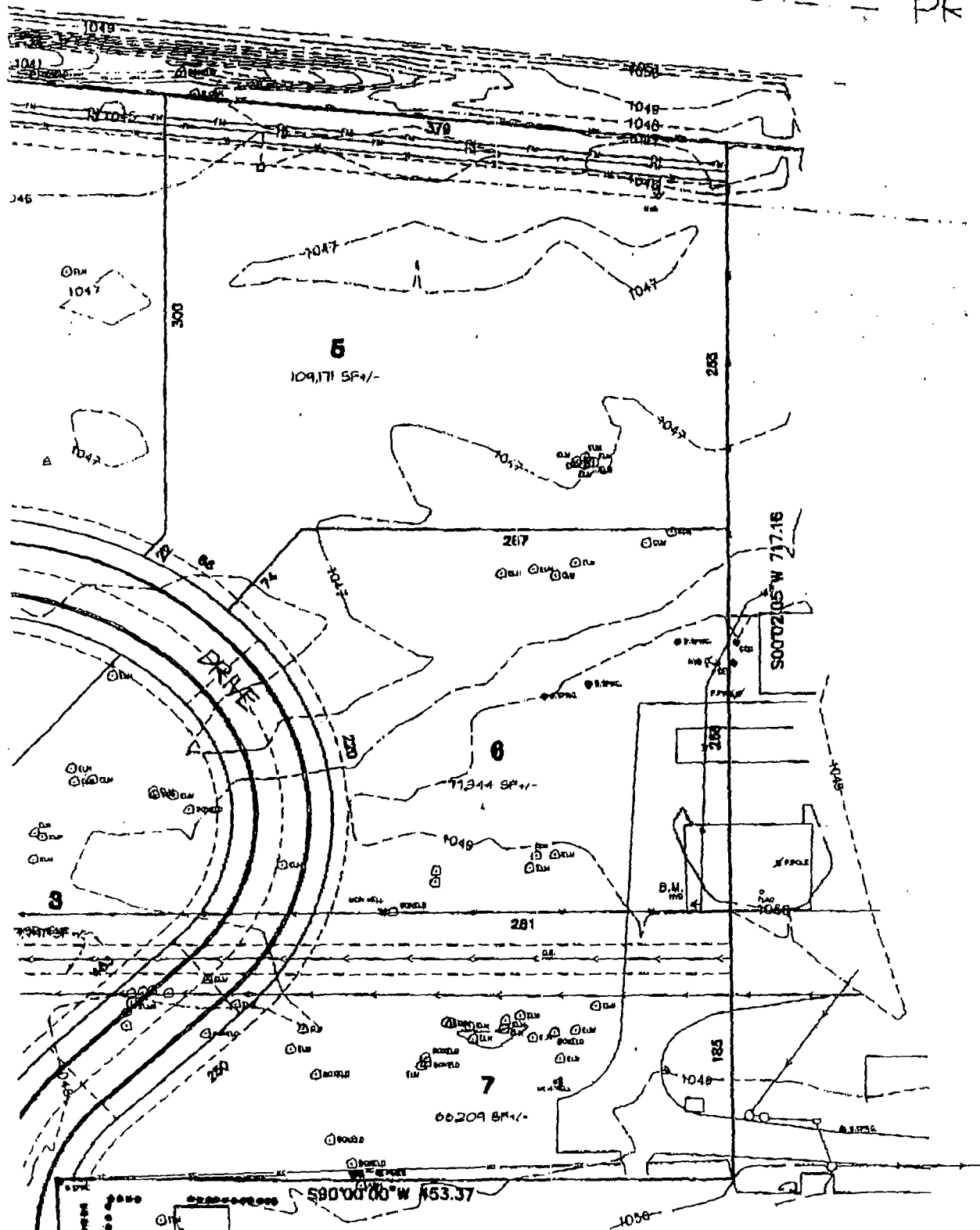
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S 1/4 OF THE S 1/4
SEC. 8, T24N, R20W
STEARNS COUNTY, ND
IRON MONUMENT

B.M.

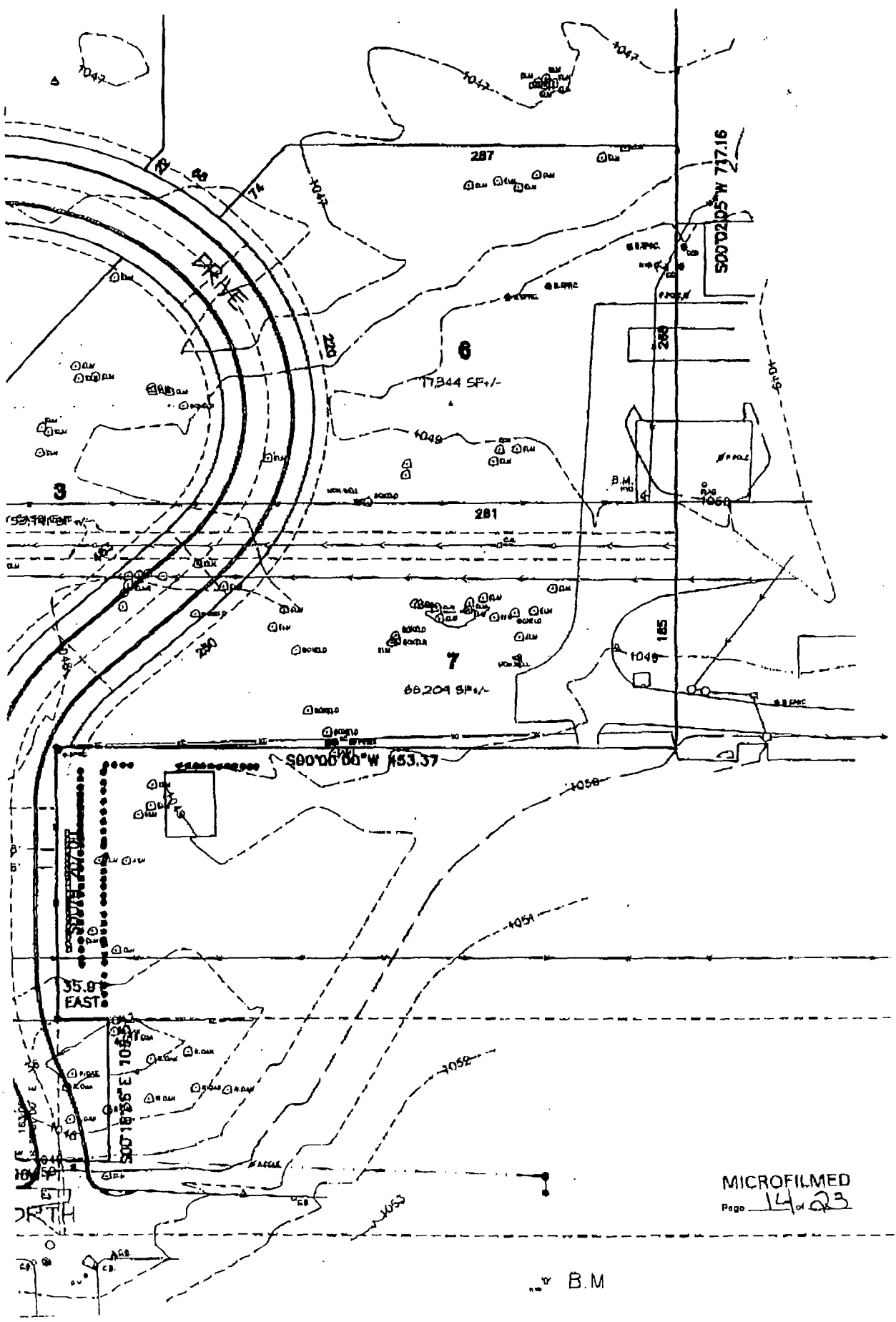
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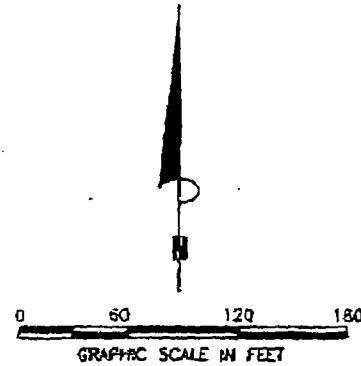
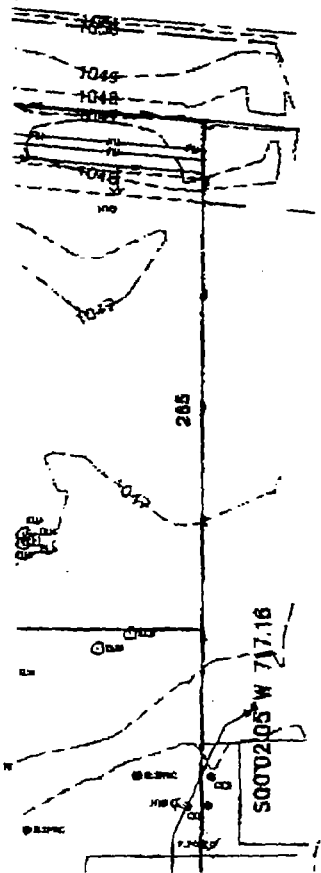


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B.M.

EST RIVER BUSINESS PARK

PRELIMINARY PLAT

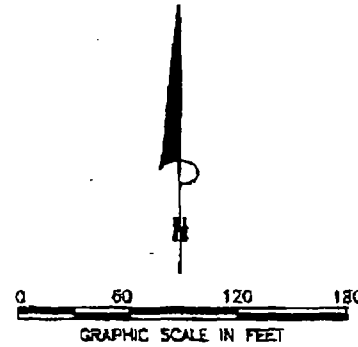
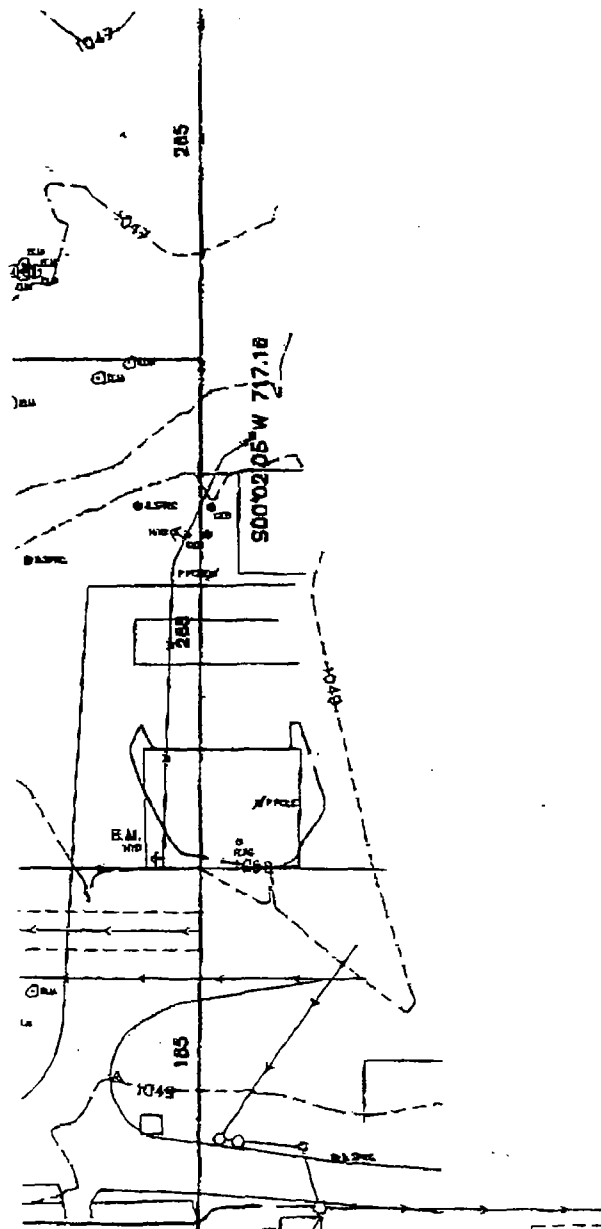


OWNER:
The City of Maite Park
19 13th Avenue North
Maite Park, MN 56587

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DATE:	15 MARCH 1996	REVISIONS	20 MARCH 1996
DRAWN BY:	STROEING		FEBRUARY 1997
CHECKED BY:	WILLIAMSON		
SURVEY BY:			

AND ASSOCIATES, INC.
SAINT GERMAIN
7, MN 56301



OWNER:
The City of Walke Park
19 13th Avenue North
Walke Park, MN 56387

DEVELOPER:
R.A. Morton and Associates, Inc.
821 West St. German
St. Cloud, MN 56301

LAND DESCRIPTION

That part of the Southwest Quarter of the Southeast Quarter of Section 8, Township 124 North, Range 28 West, Stearns County, Minnesota described as follows: Commencing at the southwest corner of the said Southwest Quarter of the Southeast Quarter, thence North 89° 45' 00" W.

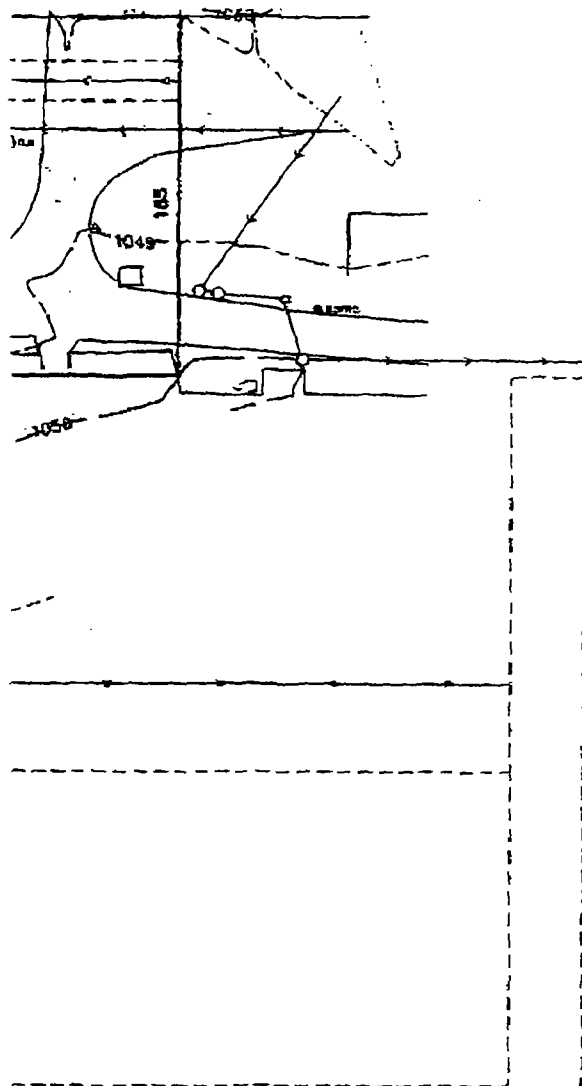
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DATE	BY	TIME	LABS
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R.A. MORTON AND ASSOCIATES, INC.
821 WEST SAINT GERMAIN
ST. CLOUD, MN 56301

NOTE

CENTENNIAL PLAZA
88 8TH STREET NORTH
CLOUD, MN 56303
PHONE 320.251.4353
LECOFF 320.251.6252



LAND DESCRIPTION

That part of the Southwest Quarter of the Southeast Quarter of Section 8, Township 124 North, Range 18 West, Stearns County, Minnesota described as follows: Commencing at the southwest corner of the said Southwest Quarter of the Southeast Quarter; thence North 90 degrees 00 minutes 00 seconds East, along the south line of the said Southwest Quarter of the Southeast Quarter, a distance of 857.42 feet; thence North 00 degrees 00 minutes 00 seconds East a distance of 163.00 feet to the actual point of beginning; thence North 90 degrees 00 minutes 00 seconds East a distance of 35.91 feet; thence South 00 degrees 18 minutes 56 seconds East a distance of 106.57 feet to the northerly right of way line of 3rd Street North; thence North 88 degrees 05 minutes 15 seconds West a distance of 196.11 feet; thence North 86 degrees 10 minutes 28 seconds West, along said right of way line, a distance of 180.43 feet; thence North 64 degrees 59 minutes 30 seconds West, along said right of way line, a distance of 178.00 feet; thence North 50 degrees 02 minutes 04 seconds West, along said right of way line, a distance of 100.53 feet to the easterly right of way line of 10th Avenue North (County Road Number 138); thence North 03 degrees 25 minutes 54 seconds West, along said right of way line, a distance of 180.94 feet; thence North 00 degrees 22 minutes 57 seconds East a distance of 857.56 feet to the southerly right of way line of Burlington North Railroad; thence South 85 degrees 06 minutes 57 seconds East a distance of 1057.20 feet; thence South 00 degrees 02 minutes 05 seconds West a distance of 717.16 feet; thence South 90 degrees 00 minutes 00 seconds West a distance of 453.31 feet; thence South 00 degrees 00 minutes 00 seconds West a distance of 207.00 feet to the point of beginning.

Reserving a perpetual 20.00 foot drainage easement over, under and across said tract. The centerline of said 20.00 foot easement begins on the west line of said tract, distant 654.75 feet south of the northwest corner of said tract; thence east to a point on the east line of said tract distant 964.19 feet south of the northeast corner of said tract and terminate said easement.

Also reserving a perpetual 42.00 foot utility easement over, under and across the north 42.00 feet thereof.

Subject to a 30 feet perpetual easement to AES Power Distribution, Inc. over the north 3000 feet thereof and said easement to terminate 9/2008.

EXHIBIT 1

17-23
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9th. Fl. 1 of 1	BONESTROO WILLIAMSON KOTAMITH	Engineers • Architects 2000 6TH STREET NORTH ST. CLOUD, MN 56303 SURVEYORS TELEPHONE 320.251.4553 TELECOPY 320.251.8252 CENTENNIAL PLAZA
MN FILE NUMBER 9621T		

**Soil Contaminants of Concern
Soil Remediation Levels
for Lagoons and Sandblast Sands
Burlington Northern Car Shop Site, Waite Park, Minnesota**

Matrix/Compound	Concentrations Detected in the Soils (1)		Background (4) Concentrations Surface Soils min/max (avg) mg/kg	Remediation Level (A)		Confirmation Sampling Methods
	Operable Unit 1 Lagoon	Operable Unit 2 Sandblast Sands (2)		Unrestricted Land Use mg/kg	Commercial/ Industrial Land Use mg/kg	
	min/max	min/max				
	mg/kg	mg/kg				
Metals						
Arsenic (c)	0.6/42	0.53/18	1.2/5.7 (3.5)	10	20	6010/7060
Cadmium	0.9/4.9	0.5/2.8	ND	10	270	6010/7130
Lead	8.5/120,000	5.3/17,000	14/170 (38.5)	500	1000	6010/7420
Semi-Volatile Organic Compounds (SVOCs)						
Anthracene	NA	NA	0.065/1 (0.227)	NGA	NGA	8270
Benzo[ghi]perylene	NA	NA	ND	NGA	NGA	8270
Fluoranthene	NA	NA	0.094/4.6 (0.834)	NGA	NGA	8270
Fluorene	NA	NA	0.062/0.12 (0.033)	NGA	NGA	8270
Naphthalene	NA	NA	0.027/0.031 (0.011)	NGA	NGA	8270
Phenanthrene	NA	NA	0.058/3 (0.543)	NGA	NGA	8270
Pyrene	NA	NA	0.068/2.7 (0.499)	NGA	NGA	8270
total cPAHs (c)	NA	NA	ND/23 (4.0)	NGA	NGA	8270
Polychlorinated Biphenols (PCBs)						
PCBs, total (c)	ND/570	NA	NA		1	9080

(1) Represents minimum and maximum numbers detected during investigative studies.

(2) Operable Unit 2 also includes the contaminated dirt floor of the Paint Building.

The minimum/maximum concentrations of lead detected in the soils from the dirt floor of the Paint Building are 800/20,000 mg/kg. The detected concentrations for TCLP soil analysis for lead is 4,819.8.

The minimum/maximum concentrations of cadmium detected in the dust samples from the Paint Building are ND/180 mg/kg. The detected concentrations for TCLP soil analysis for cadmium is <0.001.

(3) Represents Site-specific background concentrations developed during Site investigations.

(4) Unrestricted land use applies to Area A. Industrial land use applies to Areas B through H.

(c) - carcinogenic

ND - Not Detected

NA - Not Analyzed

NGA - No Goal Assigned. A goal was not assigned at this time due to lack of analysis. A goal may be assigned based on the results of confirmation sampling.

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EXHIBIT 2

Ground Water Contaminants of Concern
Ground Water Monitoring Requirements
Burlington Northern Car Shop Site, Waite Park, Minnesota

Matrix/Compound	Concentrations Detected in the Ground Water (1)			Minnesota Background Concentrations (2)	RA1 (3)	MCL (4)	HRL (5)	Aquatic Life Standard (6)	Ground Water Monitoring Methods
	Atrio-A Lagoon	Atrio-O Lagoon	Other						
	mg/l	mg/l	mg/l						
Metals									
Arsenic (c)	7.0/17	ND	ND	1 to 58	0.2	50 (7)		360	7060
Cadmium	ND	ND	ND	0.005 to 21	4	5	4	133	7131/6010
Lead	ND	31/31	ND	.1 to 1900	20	15		388	7421
Volatile Organic Compounds (VOCs)									
Tetrachloroethane (PCE)	1/1	ND	0.1/61	-	7	5		428	465D
Trichloroethane (TCE)	0.2/3.0	ND	0.1/100	-	30	5		6988	465D
Semi-Volatile Organic Compounds (SVOCs)									
Anthracene	ND	ND	0.15/19	-	2000		2000	1.6	8270mod
Fluoranthene	0.36/0.36	0.16/0.48	0.1/4.0	-	.300			199	8270mod
Fluorene	ND	0.2/1.3	0.25/49	-	.300				8270mod
Naphthalene	1.7/1.7	ND	0.7/740	-	.30				8270mod
Phenanthrene	ND	0.42/1.4	0.27/40	-				59	8270mod
Pyrene	0.34/0.34	.34/2.2	0.15/14	-	.200		200		8270mod
total cPAHs (c)	ND/3.2	ND/16.1	ND/73.8	-	0.03	0.3(BaP)			8270mod
total nPAHs	ND/5.8	ND/16.2	ND/1426	-	0.3				8270mod
Polychlorinated Biphenols (PCBs)									
PCBs, total (c)	ND/3.3	2.9/220	ND	-		0.5		2	8080

Footnotes:

(1) Where minimum and maximum numbers are the same, the compound was only detected once.

(2) Minnesota Background Concentrations from the Ambient Network, 1982, developed by the MPCA, GWSW Program Development Section.

(3) Minnesota Department of Health (MDH) Recommended Allowable Limits (RALs) for Drinking Water. RALs are health based and apply primarily to private water supplies, for which there are no standards regulating levels of drinking water contaminants.

(4) Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system. The MCLs may not be health based.

(5) Health Risk Limit numbers are applied to substances found to degrade Minnesota ground water. HRLs are health based and will supersede RALs where appropriate.

(6) Aquatic Life Standards, Maximum Standard, shall apply to the point where surface water meets ground water. For this Site, the ground water monitoring well closest to the Sand river was chosen. A new well, installed at the point where ground water meets surface water, is an acceptable replacement.

(7) The MCL for Arsenic is 50 ug/l. According to Charles Abernethy, EPA, the 50 ug/l is based on an incorrect assumption of 800 ug/day dietary intake, the assumption should be 40 to 60 ug/day.

(c) = carcinogenic

ND = not detected

NA = not analyzed

(BaP) = Benzo(a)pyrene

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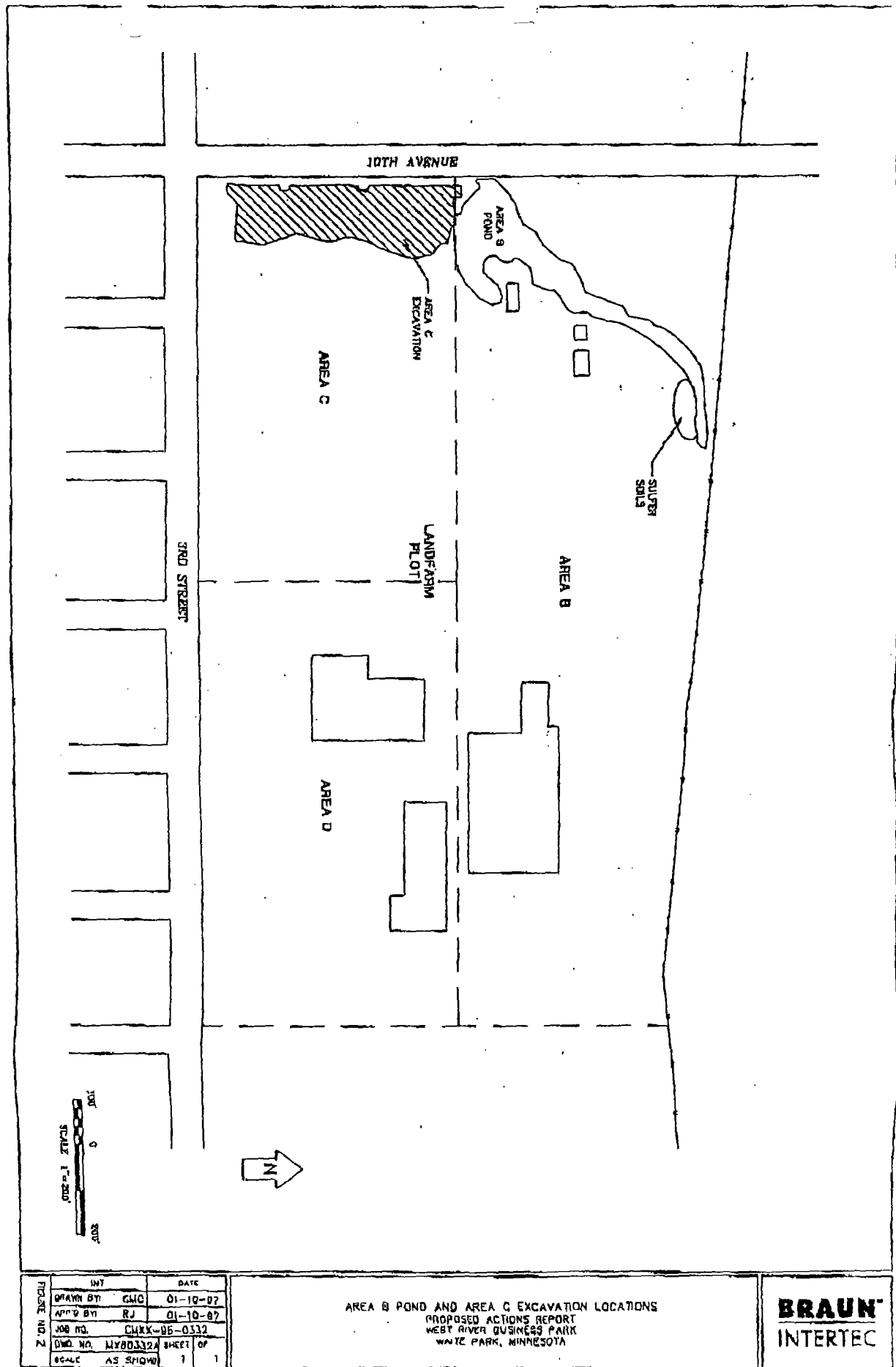
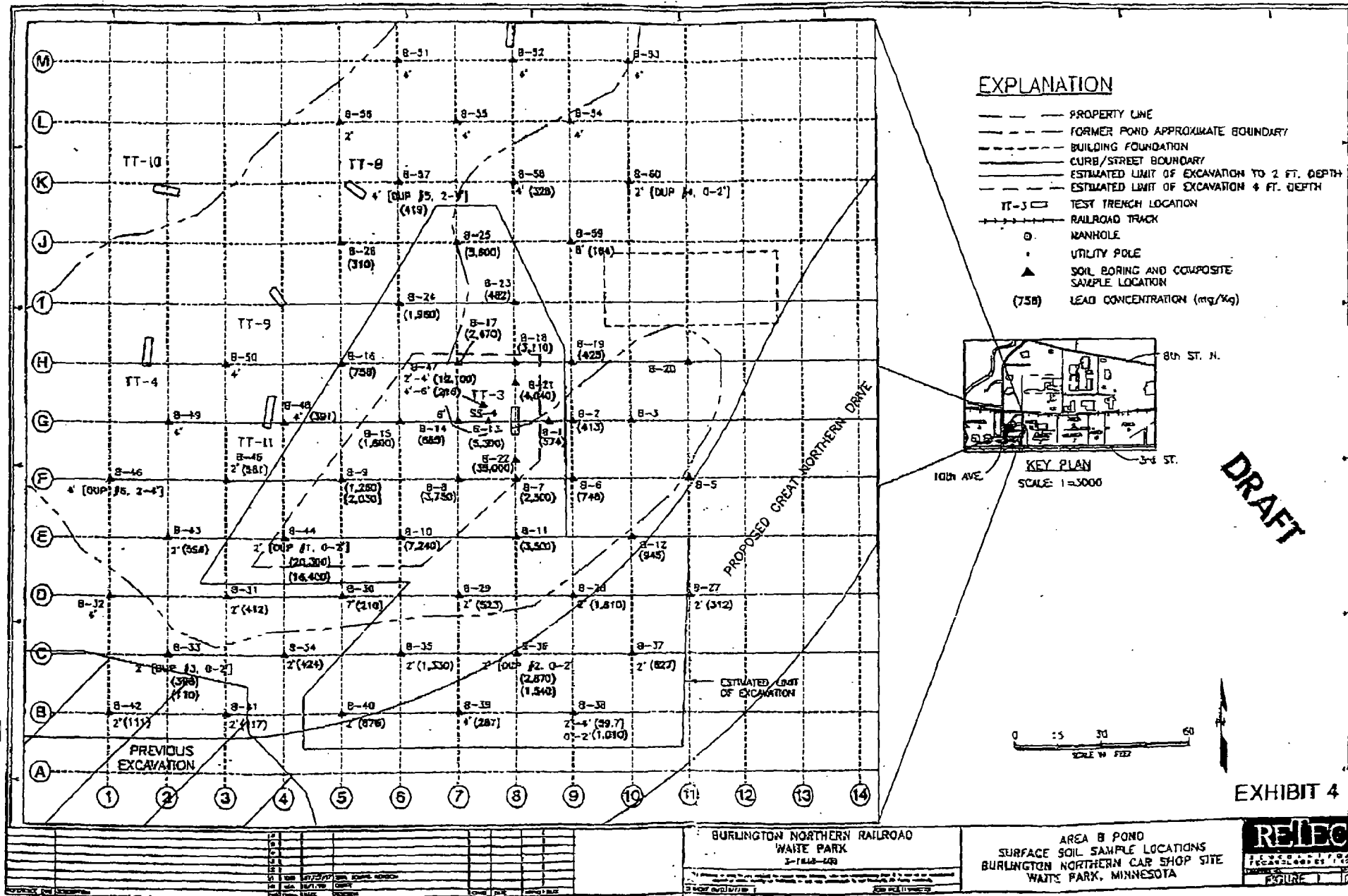


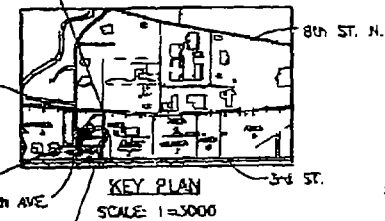
EXHIBIT 3

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2002



EXPLANATION

- PROPERTY LINE
- - - FORMER POND APPROXIMATE BOUNDARY
- - - BUILDING FOUNDATION
- - - CURB/STREET BOUNDARY
- - - ESTIMATED LIMIT OF EXCAVATION TO 2 FT. DEPTH
- - - ESTIMATED LIMIT OF EXCAVATION 4 FT. DEPTH
- TT-3 TEST TRENCH LOCATION
- RAILROAD TRACK
- MANHOLE
- UTILITY POLE
- ▲ SOIL BORING AND COMPOSITE SAMPLE LOCATION
- (758) LEAD CONCENTRATION (mg/Kg)



DRAFT

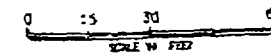


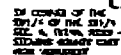
EXHIBIT 4

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BURLINGTON NORTHERN RAILROAD
WAITE PARK
3-1848-600

AREA B POND
SURFACE SOIL SAMPLE LOCATIONS
BURLINGTON NORTHERN CAR SHOP SITE
WAITE PARK, MINNESOTA





Oil impacted soil is present in Trench locations TT-4 and TT-10.



RELEC
RESEARCH & ELECTRONICS CORPORATION

845329

97 MAY 16 PM 2:35

COUNTY RECORDER
STEARNS CO. MN
PATRICIA M. OVERMAN
BY *[Signature]* DEPUTY

MICROFILMED
23 23



Attorneys at Law

ST. CLOUD

11 Seventh Avenue North
P.O. Box 1433
St. Cloud, MN 56302-1433
320•251•1055
800•445•9617
FAX 320•251•5896

MINNEAPOLIS

3908 IDS Center
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Minneapolis, MN 55402
612•339•9206
800•445•9617
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INTERNET ADDRESS

rajhan@cloudnet.com

FRANK J. RAJKOWSKI *†
GORDON H. HANSMEIER
FREDERICK L. GRUNKE
THOMAS G. JOVANOVICH
JOHN H. SCHERER
PAUL A. RAJKOWSKI †
KEVIN F. GRAY
WILLIAM J. CASHMAN
RICHARD W. SOBALVARRO
BRIDGET M. LINDQUIST
BRIAN L. WILLIAMS

FRANK J. RAJKOWSKI IS ADMITTED TO PRACTICE
IN NORTH DAKOTA,
GORDON H. HANSMEIER
IN NORTH DAKOTA AND WISCONSIN,
PAUL A. RAJKOWSKI IN WISCONSIN
AND WILLIAM J. CASHMAN IN SOUTH DAKOTA

* MEMBER OF AMERICAN
BOARD OF TRIAL ADVOCATES.
† QUALIFIED ADR NEUTRAL

RAJKOWSKI HANSMEIER LTD.

Reply to: St. Cloud

June 27, 1997

Ms. Brenda Winkler
Minnesota Pollution Control Agency
5th Floor
520 Lafayette Road
St. Paul, MN 55155

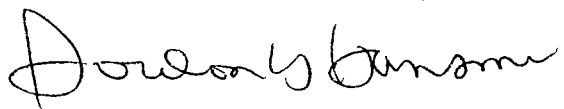
RE: Easement and Declaration of Restrictions and
Covenants / City of Waite Park
Our File No. 18266

Dear Ms. Winkler:

Enclosed please find two copies of the recorded
Easement and Declaration of Restrictions and Covenants
in the above matter. Also enclosed is your original
map.

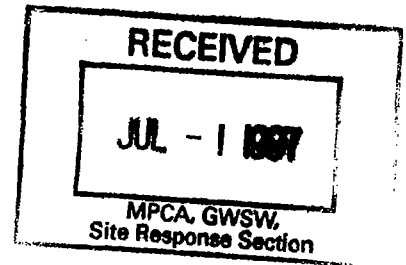
Sincerely,

RAJKOWSKI HANSMEIER LTD.


By
Gordon H. Hansmeier

GHH:ds
Enclosure

n:\city\waite\1997\corrs\ac062797.011



Ground Water & Solid Waste Division Site Response Section	
Site Name	
Category	
Subcategory	
Initials	

Easement, June 11, 1997

EASEMENT

This indenture made this 11th day of JUNE, 1997, between The Burlington Northern and Santa Fe Railway Company, a Delaware corporation, Grantor, and the City of Waite Park, a municipal corporation, of the County of Stearns and State of Minnesota, Grantee.

WITNESSETH: That Grantor in consideration of the sum of \$1.00 and other good and valuable consideration to it in hand paid by Grantee, receipt of which is hereby acknowledged, does hereby grant, bargain, quitclaim and convey unto the Grantee a 66.00 foot roadway and utility easement over, under and across the South Half of the Southeast Quarter (S 1/2 SE 1/4) of Section 8, Township 124 North, Range 28 West, in the City of Waite Park, Stearns County, Minnesota.

Said easement commences at the southeast corner of said Section 8; thence North 90 degrees 00 minutes 00 seconds West, assumed bearing, along the south line of said Section 8, a distance of 660.00 feet; thence North 00 degrees 00 minutes 00 seconds East 342.59 feet to the point of beginning of said easement and said easement lies 33.00 feet east and 33.00 feet west of the following line; thence North 00 degrees 02 minutes 05 seconds West, from said point of beginning, a distance of 97.30 feet to Point "A" and there terminate said 66.00 foot easement; thence beginning at Point "A" an easement that lies 33.00 feet east and 11.00 feet west of the following described line; thence North 00 degrees 02 minutes 05 seconds West, from said Point "A", a distance of 467.58 feet and terminate said easement.

The foregoing easement is made subject to all existing interests in the above-described premises to whomsoever belonging and of whatsoever nature, and any and all extensions thereof, including, but not limited to all leases, licenses and permits

MICROFILMED

Page 1 of 4

previously granted by Grantor or its predecessors, pipelines, wire lines or cables, if any.

Grantee hereby agrees that all work performed in the construction, use, maintenance or improvement of the roadway shall be performed in a good and workmanlike manner and will not interfere with the operations of the Grantor, its contractors, lessees, licensees or others authorized by Grantor to use Grantor's property in the general area of the property subject to this Easement.

Grantee hereby agrees that the costs required to perform the above-described work shall not be assessed against the Grantor unless the improvement is beneficial to Grantor and Grantor agrees, in writing, to assume a share of said costs.

Grantee hereby agrees to indemnify and hold harmless Grantor from all lawful claims, demands, judgments, losses, and costs associated with injury or death arising out of the acts or omissions of the Grantee, its employees, contractors, licensees and invitees in its construction, use or maintenance of the roadway and any utilities on the easement. Grantee agrees to supervise any contractors so that said contractors comply with the same terms and conditions assumed by Grantee in this Easement.

Any and all cuts and fills, excavations or embankments necessary in the construction, maintenance or future alteration of the roadway shall be made in such a manner as will provide adequate drainage of and from adjoining lands, the easement area, and Grantor's property; and wherever any such fill or embankment

shall obstruct the drainage from Grantor's property, the Grantee shall construct and maintain such culverts or drains as may be requisite to preserve proper drainage, including, where necessary, constructing extensions of existing drains, culverts or ditches to preserve the present flow of drainage or other waters. All materials and workmanship shall be equally as good as those now existing.

Grantor does not warrant its title to said premises, not undertake to defend the Grantee in the peaceable possession, use or enjoyment thereof; and the grant herein made is subject to all outstanding rights or interests of others; including the lessees and licensees of the Grantor.


TO HAVE AND TO HOLD unto the Grantee for public use and for the purposes stated herein only.

IN TESTIMONY WHEREOF, the parties have hereunto set their hands on the date and year first written above.

THE BURLINGTON NORTHERN AND SANTA FE
RAILWAY COMPANY

By 
Its General Director Real Estate

CITY OF WAITE PARK

By 
Richard Miller
Its Mayor

Texas
STATE OF ~~MINNESOTA~~)
COUNTY OF ~~MINNESOTA~~) SS.
COUNTY OF ~~MINNESOTA~~)

On this 11th day of June, 1997, before me, a notary public, personally appeared D.P. Schneider, to me personally known, who, being by me duly sworn, did say that he is the General Director Real Estate of The Burlington Northern and Santa Fe Railway Company, a corporation under the laws of the State of Delaware, and acknowledged said instrument to be the free act and deed of said corporation.



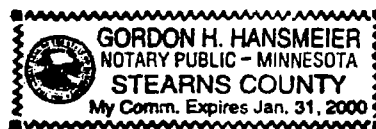
Doris P. Lodics
Notary Public

STATE OF MINNESOTA)
COUNTY OF STEARNS) SS.

On this 16th day of June, 1997, before me, a notary public, personally appeared Richard Miller, to me personally known, who, being by me duly sworn, did say that he is the Mayor of the City of Waite Park, a municipal corporation, and acknowledged said instrument to be the free act and deed of said municipal corporation.

Gordon H. Hansmeier
Notary Public

n:\city\waite2\ac041597.251



THIS INSTRUMENT DRAFTED BY:
RAJKOWSKI HANSEMEIER LTD.
Gordon H. Hansmeier - 40770
11 Seventh Avenue North
P.O. Box 1433
St. Cloud, MN 56302-1433
(320) 251-1055

848216

97 JUN 26 PM 12:46

COUNTY RECORDER
STEARNS CO. MN
PATRICIA M. OVERMAN
DEPUTY

MICROFILMED

Page 4 of 4

Affidavit Concerning Real Property Contaminated with Hazardous Substances,
May 1, 2001

**AFFIDAVIT CONCERNING REAL PROPERTY
CONTAMINATED WITH HAZARDOUS SUBSTANCES**

STATE OF MINNESOTA)
) ss.
COUNTY OF STEARNS)

West River Business Park Partnership, L.L.P. ("Owner"), as owner of the real property described herein, being duly sworn, states the following under oath:

1. This Affidavit is made pursuant to Minn. Stat. § 115B.16, subd. 2, which requires that before any transfer of ownership of any property which the owner knows is subject to extensive contamination by release of a hazardous substance, the owner shall record with the county recorder of the county in which the property is located an affidavit containing a legal description of the property and disclosing to any potential transferees: a) that the property has been used to dispose of hazardous waste or that the property is contaminated by a release of a hazardous substance(s), b) the identity, quantity, location, condition and circumstances of the disposal or contamination to the full extent known or reasonably ascertainable; and c) that, if the property was used as a permitted hazardous waste disposal facility, the use of the property or some portion of it may be restricted as provided in Minn. Stat. § 115B.16, subd. 1.

2. West River Business Park Partnership, L.L.P. is the owner of West River Business Park Addition ("Property") located at the intersection of 10th Avenue North and 3rd Street West in the City of Waite Park ("City"), County of Stearns, State of Minnesota, which includes those certain parcels legally described as follows:

Lot Six (6), Block One (1), West River Business Park Addition ("Lot 6")

Lot Seven (7), Block One (1), West River Business Park Addition ("Lot 7")

3. The Property is a 22 acre site which had previously been used by Burlington Northern Santa Fe Railroad ("BN") as a repair facility for its railroad cars and engines. As a result of this use, and the deposit of waste material byproducts of this use on the site, the site became contaminated and cleanup was ordered by the Environmental Protection Agency and the Minnesota Pollution Control Agency ("MPCA"). The City acquired the site from BN as part of the cleanup process in

which BN agreed to remain responsible for any future cleanup required as the Property developed. The Owner acquired the Property from the City in May of 1996 subject to it being developed in accordance with the terms of a Development Agreement between the Owner and the City dated May, 1996.

4. Prior to acquisition of the Property by the Owner, the MPCA and BN worked to clean up the entire BN site. Upon acquisition of the Property by the Owner, the Owner began working with the MPCA, through its Voluntary Investigation and Cleanup program to develop the site. A development plan and site safety plan was filed with the MPCA setting out the development to occur and the procedures to be followed if contaminants were discovered. The Owner has proceeded in accordance with these plans.

5. Development of Lot 6 and Lot 7 started in the fall of 1997 with a warehouse/office facility proposed for each lot. A geo-technical soil evaluation was conducted in the first quarter of 1997, utilizing procedures that conformed with the site safety plan. Following this evaluation and during subsequent construction activities, contaminants were found and construction activities were stopped while additional subsurface investigation was conducted to determine the extent and magnitude of impacted soil. In accordance with a draft master response action plan dated October 20, 1998, which plan was approved for implementation on Lot 6 and Lot 7 by the MPCA, excavation of the contaminated soil on Lot 6 and Lot 7 was commenced. Excavation of contaminated soil to a depth of four feet below final landscape grade, four feet-nine inches below final grade of pavement rated for heavy duty traffic areas and two feet-nine inches below final grade of pavement rated for light duty traffic areas was commenced on November 12, 1998 and completed on April 9, 1999. Construction of the warehouse/office facilities on the Lot 6 and Lot 7 were completed in the second quarter of 2000.

6. No contamination remains on Lot 6 and Lot 7 except for impacted soil in two locations along the westerly boundary of Lot 6 which could not be excavated due to the presence of a utility line. The location of the impacted soils are detailed in the West River Business Park, Waite Park, Minnesota, Lots 6 and 7, Block 1, As-Built Report submitted to the MPCA on June 15, 2000 by Braun Intertec Corporation on behalf of the Owner and shown on Exhibit A attached hereto.

7. No ongoing operation and maintenance structures or equipment, such as monitoring wells, are located on Lot 6 and Lot 7.

8. Any person who is planning any use or activity which may adversely affect the protectiveness of the response action or which has the potential to disturb the Property should contact the Minnesota Pollution Control Agency prior to commencement of the planned activities.

9. The response actions at the property were approved by the MPCA based on the assumption that the Property was to be used for commercial or industrial activities. If the use is changed, the change could associate the property owner with the release or threatened release of hazardous substances, pollutants or contaminants and could result in a requirement for performance of further response actions at the property.

West River Business Park Partnership, L.L.P.

By *[Signature]*
Its *Managing Partner*

STATE OF MINNESOTA)
) ss.
COUNTY OF STEARNS)

On this 15th day of May, 2001, before me a notary public within and for said County and State, personally appeared Ronald Morton to me personally known, who, being duly sworn by me on oath, did say that he is the person who signed the foregoing instrument and acknowledged that he signed the same as free act and deed for the uses and purposes therein set forth.

Linda M. Day
Notary Public

THIS INSTRUMENT WAS DRAFTED BY:

HALL & BYERS, P.A.
Stanley J. Weinberger, Jr.
1010 West St. Germain
Suite 600
St. Cloud, MN 56301
(320) 252-4414



Affidavit Concerning Real Property Contaminated with Hazardous Substances,
October 16, 2001

AFFIDAVIT CONCERNING REAL PROPERTY
CONTAMINATED WITH HAZARDOUS SUBSTANCES

STATE OF MINNESOTA)
) ss.
COUNTY OF STEARNS)

West River Business Park Partnership, L.L.P. and Westland Properties, LLP, as Owners of the real property described herein, being duly sworn, states the following under oath:

1. This Affidavit is made pursuant to Minn. Stat. § 15.16B, subd. 2, which requires that before any transfer of ownership of any property which the owner knows is subject to extensive contamination by release of a hazardous substance, the owner shall record with the county recorder of the county in which the property is located an affidavit containing a legal description of the property and disclosing to any potential transferees: a) that the property has been used to dispose of hazardous waste or that the property is contaminated by a release of a hazardous substance(s), b) the identity, quantity, location, condition and circumstances of the disposal or contamination to the full extent known or reasonably ascertainable; and c) that, if the property was used as a permitted hazardous waste disposal facility, the use of the property or some portion of it may be restricted as provided in Minn. Stat. § 15.16B, subd. 1.

2. West River Business Park Partnership, L.L.P. is the owner of that portion of West River Business Park Addition ("Property") located at the intersection of 10th Avenue North and 3rd Street West in the City of Waite Park ("City"), County of Stearns, State of Minnesota, which includes that certain parcel legally described as follows:

Lot One (1), Block Two (2), West River Business Park Addition

and Westland Properties, LLP is the owner of that portion of the Property which includes those certain parcels legally described as follows:

Lot Two (2), Block One (1), West River Business Park Addition

Lot Three (3), Block One (1), West River Business Park Addition

Lot Four (4), Block One (1), West River Business Park Addition

Lot Five (5), Block One (1), West River Business Park Addition

Lot Two (2), Block Two (2), West River Business Park Addition

Lot Three (3), Block Two (2), West River Business Park Addition

(all of the parcels being collectively referred to herein as "Parcel #1).

3. The Property is a 22 acre site which had previously been used by Burlington Northern Santa Fe Railroad ("BN") as a repair facility for its railroad cars and engines. As a result of this use, and the deposit of waste material byproducts of this use on the site, the site became contaminated and cleanup was ordered by the Environmental Protection Agency and the Minnesota Pollution Control Agency ("MPCA"). The City acquired the site from BN as part of the cleanup process in which BN agreed to remain responsible for any future cleanup required as the Property developed. The Owner acquired the Property from the City in May of 1996 subject to it being developed in accordance with the terms of a Development Agreement between the Owner and the City dated May, 1996.

4. Prior to acquisition of the Property by the Owner, the MPCA and BN worked to cleanup the entire BN site. Upon acquisition of the Property by the Owner, the Owner began working with the MPCA, through its Voluntary Investigation and Cleanup program to develop the site. A development plan and site safety plan was filed with the MPCA setting out the development to occur and the procedures to be followed if contaminants were discovered. The Owner has proceeded in accordance with these plans.

5. The lots which comprise Parcel #1 are currently undeveloped but have been the subject of remediation operations by BN and the Owners, in cooperation with the Minnesota Department of Trade and Economic Development, working pursuant to a remediation plan prepared by Wenck Associates, Inc. Contaminants were found within the site which encompassed approximately sixty percent (60%) of Parcel #1. The Owner and BN excavated the site, removing all contaminated soils and replaced them with noncontaminated soil. This was completed in the fourth quarter of 2001.

6. No contamination remains on Parcel #1.

7. The response action involved the removal of all contaminated soils from the site and no ongoing operation and maintenance structures or equipment, such as monitoring wells, are located on Parcel #1.

8. Any person who is planning any use or activity which may adversely affect the protectiveness of the response action or which has the potential to disturb the Property should contact the Minnesota Pollution Control Agency prior to commencement of the planned activities.

9. The response actions at the Property were approved by the MPCA based on the assumption that the Property was to be used for commercial or industrial activities. If the use is changed, the change could associate the Property owner with the release or threatened release of hazardous substances, pollutants or contaminants and could result in a requirement for performance of further response actions at the Property.

West River Business Park Partnership, L.L.P.

By *Ronald A. Morten*
Its *Ronald A. Morten*

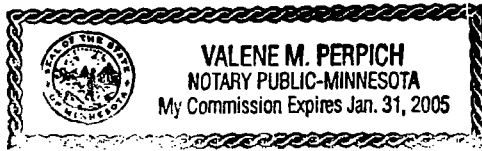
Westland Properties, LLP

By *Ronald A. Morten*
Its *Ronald A. Morten*

STATE OF MINNESOTA

COUNTY OF STEARNS

On this 16 day of October, 2001, before me a notary public within and for said County and State, personally appeared Ronald A. Morten to me personally known, who, being duly sworn by me on oath, did say that he is the person who signed the foregoing instrument and acknowledged that he signed the same as free act and deed for the uses and purposes therein set forth.

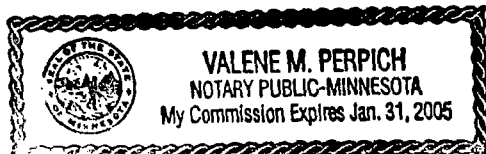


Valene M. Perpich
Notary Public

STATE OF MINNESOTA

COUNTY OF STEARNS

On this 16 day of October, 2001, before me a notary public within and for said County and State, personally appeared Ronald A. Morten to me personally known, who, being duly sworn by me on oath, did say that he is the person who signed the foregoing instrument and acknowledged that he signed the same as free act and deed for the uses and purposes therein set forth.



Valene M. Perpich
Notary Public

THIS INSTRUMENT WAS DRAFTED BY:

HALL & BYERS, P.A.
Stanley J. Weinberger, Jr.
1010 West St. Germain
Suite 600
St. Cloud, MN 56301
(320) 252-4414

Affidavit Concerning Real Property Contaminated with Hazardous Substances,
November 16, 2001

۱۱۱۱ / ۱۱۱۱

STATE OF MINNESOTA)

) ss.

COUNTY OF STEARNS)

West River Business Park Partnership, L.L.P., as Owners of the real property described herein, being duly sworn, states the following under oath:

1. This Affidavit is made pursuant to Minn. Stat. § 115.16B, subd. 2, which requires that before any transfer of ownership of any property which the owner knows is subject to extensive contamination by release of a hazardous substance, the owner shall record with the county recorder of the county in which the property is located an affidavit containing a legal description of the property and disclosing to any potential transferees: a) that the property has been used to dispose of hazardous waste or that the property is contaminated by a release of a hazardous substance(s), b) the identity, quantity, location, condition and circumstances of the disposal or contamination to the full extent known or reasonably ascertainable; and c) that, if the property was used as a permitted hazardous waste disposal facility, the use of the property or some portion of it may be restricted as provided in Minn. Stat. § 115.16B, subd. 1.

2. West River Business Park Partnership, L.L.P. is the owner of that portion of West River Business Park Addition ("Property") located at the intersection of 10th Avenue North and 3rd Street West in the City of Waite Park ("City"), County of Stearns, State of Minnesota, which includes that certain parcel legally described as follows:

Lot Seven (7), Block One (1), West River Business Park Addition

(herein referred to as "Parcel #1").

3. The Property is a 22 acre site which had previously been used by Burlington Northern Santa Fe Railroad ("BN") as a repair facility for its railroad cars and engines. As a result of this use, and the deposit of waste material byproducts of this use on the site, the site became contaminated and cleanup was ordered by the Environmental Protection Agency and the Minnesota Pollution Control Agency ("MPCA"). The City acquired the site from BN as part of the cleanup process in which BN agreed to remain responsible for any future cleanup required as the Property developed. The Owner acquired the Property from the City in May of 1996 subject to it being developed in accordance with the terms of a Development Agreement between the Owner and the City dated May, 1996.

4. Prior to acquisition of the Property by the Owner, the MPCA and BN worked to cleanup the entire BN site. Upon acquisition of the Property by the Owner, the Owner began working with the MPCA, through its Voluntary Investigation and Cleanup program to develop the

site. A development plan and site safety plan was filed with the MPCA setting out the development to occur and the procedures to be followed if contaminants were discovered. The Owner has proceeded in accordance with these plans.

5. Parcel #1 has been the subject of remediation operations by BN and the Owners, working pursuant to a remediation plan approved by the MPCA. Contaminants were found within the site which encompassed approximately twenty percent (20%) of Parcel #1. The Owner and BN excavated the site, removing all contaminated soils and replaced them with noncontaminated soil. This was completed for Parcel #1 in 1998 and for the Property in the fourth quarter of 2001.


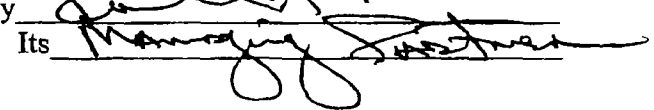
6. No contamination remains on Parcel #1 and a Certificate of Completion has been issued by the MPCA.

7. The response action involved the removal of all contaminated soils from the site and no ongoing operation and maintenance structures or equipment, such as monitoring wells, are located on Parcel #1.

8. Any person who is planning any use or activity which may adversely affect the protectiveness of the response action or which has the potential to disturb the Property should contact the MPCA prior to commencement of the planned activities.

9. The response actions at the Property were approved by the MPCA based on the assumption that the Property was to be used for commercial or industrial activities, which include use for a charter school classroom facility and a rehabilitation and therapy facility for handicapped persons, neither of which will operate outdoor playground or training areas. If the use is changed, the change could associate the Property owner with the release or threatened release of hazardous substances, pollutants or contaminants and could result in a requirement for performance of further response actions at the Property.

West River Business Park Partnership, L.L.P.

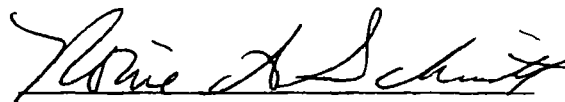
By 
Its 

STATE OF MINNESOTA

COUNTY OF STEARNS

On this 16th day of November 2001, before me a notary public within and for said County and State, personally appeared Ronald Morton to me personally known, who, being duly sworn by me on oath, did say that he is the person who signed the foregoing instrument and acknowledged that he signed the same as free act and deed for the uses and purposes therein set forth.




Notary Public

THIS INSTRUMENT WAS DRAFTED BY:

HALL & BYERS, P.A.
Stanley J. Weinberger, Jr.
1010 West St. Germain
Suite 600
St. Cloud, MN 56301
(320) 252-4414

Modification of Easement and Declaration of Restrictions and Covenants,
December 21, 2001

996097

02 JAN 18 PM 3:30

COUNTY RECORDER
STEARNS CO. MN
PATRICIA M. OVERMAN
BY [Signature] DEPUTY

RECEIVED

MAR 07 2002

MPCA, MAR Division
Petroleum & Landfill Remediation Section

**MODIFICATION OF EASEMENT AND
DECLARATION OF RESTRICTIONS AND COVENANTS**

THIS MODIFICATION OF EASEMENT AND DECLARATION is made this 21
day of Dec, 2001, by West River Business Park Partnership LL.P.

WITNESSETH:

WHEREAS, West River Business Park Partnership, L.L.P. ("Owner") is the owner of real property legally described herein (the "Property"), located in the City of Waite Park, Stearns County, Minnesota; and

WHEREAS, the Property is subject to an Easement and Declaration of Restrictions and Covenants, granted by the City of Waite Park on May 6, 1997, to the Minnesota Pollution Control Agency (MPCA) and recorded by the Stearns County Registrar of Deeds as Document Number 845329 (the "Original Easement"); and

WHEREAS, the Owner acquired title to the Property from the City of Waite Park, and is the successor-in-interest of the City with respect to the rights and obligations under the Original Easement as it applies to the Property; and

Easement Modification

SCR 1 of 6

Encl
Hall: Bygones

WHEREAS, the Original Easement may be modified by the Owner with the written consent of the Commissioner of the MPCA; and

WHEREAS, the Owner of the Property has requested the MPCA Commissioner to approve a modification of the use restrictions that apply to the Property under the Original Easement and has submitted an Affidavit dated Dec 14, 01 describing the proposed use for which a modification has been requested, which Affidavit is attached hereto as Exhibit A; and

WHEREAS, the MPCA Commissioner or her delegate, has reviewed the Owner's request and has approved the requested modification to the Original Easement for the Property;

NOW THEREFORE, the Original Easement is MODIFIED as follows:

1. Property.

This Modification applies to real property located in the City of Waite Park, Stearns County, Minnesota, legally described as:

Lot Seven (7), Block One (1), West River Business Park Addition

(the "Property"). This modification does not apply to any other real property described in the Original Easement.

2. Use Restriction Modified.

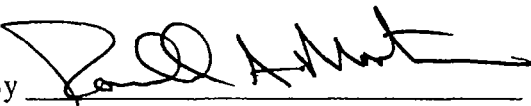
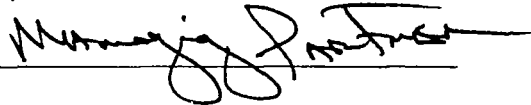
The use restriction applicable to the Property under Section 3, clause (a) of the Original Easement is modified to allow the operation of a charter school in the currently existing structure located on the Property in accordance with the more specific description of the operation as set forth in the Affidavit attached hereto as Exhibit A.

3. Other Terms and Conditions Remain In Force.

Except for the modification set forth in Section 2 herein, which is deemed to be incorporated in the Original Easement, all of the use restrictions, and other terms and conditions of the Original Easement shall continue to apply to the Property.

In WITNESS WHEREOF, this instrument has been executed on the day and year first above written.

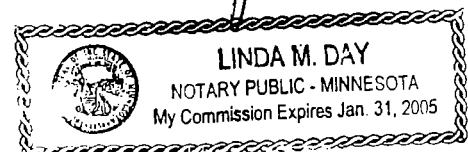
West River Business Park
Partnership, L.L.P.

By 
Title: 

State of Minnesota)
) ss.
County of Hennepin)

The foregoing instrument was acknowledged before me this 21 day of December 2001, by Ronald A. Morton of West River Business Park Partnership, L.L.P.


Notary Public

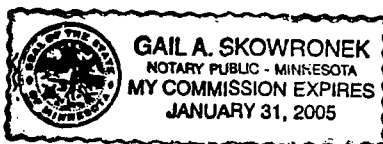


Accepted on behalf of
Minnesota Pollution Control Agency
Pursuant to Minn. Stat. § 115B.17, subd. 15

By James E. Warner
James Warner
Delegate of Karen A. Studders
Commissioner

State of Minnesota)
)ss.
County of Ramsey)

The foregoing instrument was acknowledged before me this 7th day of January,
2007, by James Warner, delegate of the Commissioner of the Minnesota Pollution Control
Agency, a Minnesota body politic, on behalf of the State of Minnesota.



Gail A. Skowronek
Notary Public

THIS INSTRUMENT WAS DRAFTED BY:

Alan C. Williams
Assistant Attorney General
Attorney General's Office
445 Minnesota Street, Suite 900
St. Paul, MN 55101

AG: 521624,v. 01

JUN 17 2001

Ronald A. Morton of St. Cloud MN, being first duly sworn on oath, deposes and says that the following is true and correct based on his information and belief:

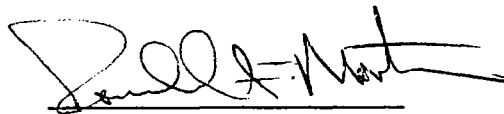
1. I am, and at all times relevant hereto have been, General Partner of West River Business Park partnership, L.L.P. (West River). In such capacity, I have had managerial responsibility for the properties owned by West River.
2. West River is the owner of that portion of West River Business Park Addition (Property) located at the intersection of 10th Avenue North and 3rd Street West in the City of Waite Park (City) County of Stearns, State of Minnesota, which includes that certain parcel legally described as follows:

Lot Seven (7), Block One (1), West River Business Park Addition ✓

3. The property is a 22-acre site, which had previously been used by Burlington Northern Santa Fe Railroad (BN) as a repair facility for its railroad cars and engines. As a result of this use, and the deposit of waste material byproducts of this use on the site, the site became contaminated and cleanup was ordered by the Environmental Protection Agency and the Minnesota Pollution Control Agency (MPCA). The City acquired the site from BN as part of the cleanup process in which BN agreed to remain responsible for any future cleanup required as the property developed. The Owner acquired the Property from the City in May of 1996 subject to it being developed in accordance with the terms of a Development Agreement between the Owner and the City dated May 1996.
4. Prior to acquisition of the Property by the Owner, the MPCA and BN worked to clean up the entire BN site. Upon acquisition of the Property by the Owner, the Owner began working with the MPCA through its Voluntary Investigation and Cleanup program to develop the site. A development plan and site safety plan was filed with the MPCA setting out the development to occur and the procedures to be followed if contaminants were discovered. The Owner has proceeded in accordance with these plans.
5. Development of Lot 7 started in the fall of 1997 with a warehouse/office facility proposed for the lot. A geotechnical soil evaluation was conducted in the first quarter of 1997, utilizing procedures that conformed with the site safety plan. Following this evaluation and during subsequent construction activities, contaminants were found and construction activities were stopped while additional subsurface investigation was conducted to determine the extent and magnitude of impacted soil. In accordance with a draft master response action plan dated October 20, 1998, which plan was approved for implementation on Lot 7 by the MPCA, excavation of the contaminated soil on Lot 7 was commenced. Excavation of contaminated soil to a depth of four feet below final landscape grade, four feet-nine inches below final grade of pavement rated for heavy duty traffic areas and two feet-nine inches below final grade of pavement rated for light duty traffic areas was commenced on November 12, 1998, and completed on April 9, 1999. Construction of the warehouse/office facilities on Lot 7 was completed in the third quarter of 2001.
6. The clean up conducted by BN was to commercial industrial standards. Soil exceeding 1000 ppm lead within four feet of the ground surface was removed. Therefore, some areas of the property contain soil contaminated with lead at concentration up to 1000 ppm at depths of four feet and greater from the ground surface. This soil exceeds the residential soil standard of 400 ppm for all soils within eight feet of the ground surface.

7. The property is the subject of an Easement and Declaration of Restrictions and Covenants dated May 6, 1997 (Restrictive Covenant), which, among other things, limits the uses of the Property and excludes certain specifically identified uses.
8. This Affidavit is made to describe the proposed use of the Property for a charter school, in connection with a requested modification of the Restrictive Covenant.
9. West River Business Park proposes to lease a portion of the currently existing building on the Property for use by a charter school. This proposed use is more specifically described as follows:
 - a. The space consists of 5,395 square feet.
 - b. The school will have grades 9-12
 - c. Ages of the (55) students will be 15-19
 - d. Hours of operation will be from 8:00 AM to 5:00 PM
 - e. There will be no outside activities, no playground areas or equipment.

Ronald A. Morton



Managing Partner
West River Business Park Partnership, L.L.P.

12/14/01

APPENDIX G - MINNESOTA STATUTES REGARDING INSTITUTIONAL
CONTROLS

Minnesota Statutes 115B Minnesota Environmental Response and Liability Act
(MERLA) excerpts

115B.02 Definitions.

Subd. 9a. Institutional controls. "Institutional controls" means legally enforceable restrictions, conditions, or controls on the use of real property, ground water, or surface water located at or adjacent to a facility where response actions are taken that are reasonably required to assure that the response actions are protective of public health or welfare or the environment. Institutional controls include restrictions, conditions, or controls enforceable by contract, easement, restrictive covenant, statute, ordinance, or rule, including official controls such as zoning, building codes, and official maps. An affidavit required under section 115B.16, subdivision 2, or similar notice of a release recorded with real property records is also an institutional control.

Subd. 15. Acquisition of property. The agency may acquire, by purchase or donation, an interest in real property, including easements, restrictive covenants, and leases, that the agency determines is necessary for response action. The validity and duration of a restrictive covenant or nonpossessory easement acquired under this subdivision shall be determined in the same manner as the validity and duration of a conservation easement under chapter 84C, unless the duration is otherwise provided in the agreement. The agency may acquire an easement by condemnation only if the agency is unable, after reasonable efforts, to acquire an interest in real property by purchase or donation.

Subd. 16. Remedy or remedial action. (a) "Remedy" or "remedial action" means those actions consistent with permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance, or a pollutant or contaminant, into the environment, to prevent, minimize or eliminate the release in order to protect the public health or welfare or the environment.

(b) Remedy or remedial action includes, but is not limited to:

(1) actions at the location of the release such as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances, pollutants or contaminants, or contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, on-site treatment or incineration, provision of alternative water supplies, any monitoring and maintenance, and institutional controls reasonably required to assure that these actions protect the public health and welfare and the environment;...

115B.16 Disposition of facilities.

Subd. 1. Closed disposal facilities; use of property. No person shall use any property on or in which hazardous waste remains after closure of a disposal facility as defined in section 115A.03, subdivision 10, in any way that disturbs the integrity of

the final cover, liners, or any other components of any containment system, or the function of the disposal facility's monitoring systems, unless the agency finds that the disturbance:

- (1) is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or
- (2) is necessary to reduce a threat to human health or the environment.

Subd. 2. Recording of affidavit. Before any transfer of ownership of any property which the owner knew or should have known was used as the site of a hazardous waste disposal facility as defined in section 115A.03, subdivision 10, or which the owner knew or should have known is subject to extensive contamination by release of a hazardous substance, the owner shall record with the county recorder of the county in which the property is located an affidavit containing a legal description of the property that discloses to any potential transferee:

- (1) that the land has been used to dispose of hazardous waste or that the land is contaminated by a release of a hazardous substance;
- (2) the identity, quantity, location, condition and circumstances of the disposal or contamination to the full extent known or reasonably ascertainable; and
- (3) that the use of the property or some portion of it may be restricted as provided in subdivision 1.

An owner must also file an affidavit within 60 days after any material change in any matter required to be disclosed under clauses (1) to (3) with respect to property for which an affidavit has already been recorded.

If the owner or any subsequent owner of the property removes the hazardous substance, together with any residues, liner, and contaminated underlying and surrounding soil, that owner may record an affidavit indicating the removal of the hazardous substance.

Failure to record an affidavit as provided in this subdivision does not affect or prevent any transfer of ownership of the property.

Subd. 3. Duty of county recorder. The county recorder shall record all affidavits presented in accordance with subdivision 2. The affidavits shall be recorded in a manner which will assure their disclosure in the ordinary course of a title search of the subject property.

Subd. 4. Penalties. (a) Any person who knowingly violates the provisions of subdivision 1 is subject to a civil penalty in an amount determined by the court of not more than \$100,000, and shall be liable under sections 115B.04 and 115B.05 for any release or threatened release of any hazardous substance resulting from the violation.

(b) Any person who knowingly fails to record an affidavit as required by subdivision 2 shall be liable under sections 115B.04 and 115B.05 for any release or threatened release of any hazardous substance from a facility located on that property.

(c) A civil penalty may be imposed and recovered by an action brought by a county attorney or by the attorney general in the district court of the county in which the property is located.

(d) Any civil fines recovered under this subdivision shall be deposited in the account.

115B.17

Subd. 15. Acquisition of property. The agency may acquire, by purchase or donation, an interest in real property, including easements, restrictive covenants, and leases, that the agency determines is necessary for response action. The validity and duration of a restrictive covenant or nonpossessory easement acquired under this subdivision shall be determined in the same manner as the validity and duration of a conservation easement under chapter 84C, unless the duration is otherwise provided in the agreement. The agency may acquire an easement by condemnation only if the agency is unable, after reasonable efforts, to acquire an interest in real property by purchase or donation. The provisions of chapter 117 govern condemnation proceedings by the agency under this subdivision. A donation of an interest in real property to the agency is not effective until the agency executes a certificate of acceptance. The state is not liable under this chapter solely as a result of acquiring an interest in real property under this subdivision.

115B.175

Subd. 2. Partial response action plans; criteria for approval. (a) The commissioner may approve a voluntary response action plan submitted under this section that does not require removal or remedy of all releases and threatened releases at an identified area of real property if the commissioner determines that all of the following criteria have been met:

(1) if reuse or development of the property is proposed, the voluntary response action plan provides for all response actions required to carry out the proposed reuse or development in a manner that meets the same standards for protection that apply to response actions taken or requested under section 115B.17, subdivision 1 or 2;

(2) the response actions and the activities associated with any reuse or development proposed for the property will not aggravate or contribute to releases or threatened releases that are not required to be removed or remedied under the voluntary response action plan, and will not interfere with or substantially increase the cost of response actions to address the remaining releases or threatened releases; and

(3) the owner of the property agrees to cooperate with the commissioner or other persons acting at the direction of the commissioner in taking response actions necessary to address remaining releases or threatened releases, and to avoid any action that interferes with the response actions.

(b) Under paragraph (a), clause (3), an owner may be required to agree to any or all of the following terms necessary to carry out response actions to address remaining releases or threatened releases:

(1) to provide access to the property to the commissioner and the commissioner's authorized representatives;

(2) to allow the commissioner, or persons acting at the direction of the commissioner, to undertake reasonable and necessary activities at the property including placement of borings, wells, equipment, and structures on the property,

provided that the activities do not unreasonably interfere with the proposed reuse or redevelopment; and (3) to grant easements or other interests in the property to the agency for any of the purposes provided in clause (1) or (2).

(c) An agreement under paragraph (a), clause (3), must apply to and be binding upon the successors and assigns of the owner. The owner shall record the agreement, or a memorandum approved by the commissioner that summarizes the agreement, with the county recorder or registrar of titles of the county where the property is located.

Subd. 6a. Voluntary response actions by responsible persons. (a) Notwithstanding subdivision 1, paragraph (a), when a person who is responsible for a release or threatened release under sections 115B.01 to 115B.18 undertakes and completes response actions, the protection from liability provided by this section applies to persons described in paragraph (c) if the response actions are undertaken and completed in accordance with this subdivision.

(b) The response actions must be undertaken and completed in accordance with a voluntary response action plan approved as provided in subdivision 3. Notwithstanding subdivision 2, a voluntary response action plan submitted by a person who is responsible for the release or threatened release must require remedy or removal of all releases and threatened releases at the identified area of real property. The identified area of real property must correspond to the boundaries of a parcel that is either separately platted or is the entire parcel.

(c) Subject to the provisions of subdivision 7, when the commissioner issues a certificate of completion under subdivision 5 for response actions completed at an identified area of real property in accordance with this subdivision, the liability protection under this section applies to:

(1) a person who acquires the identified real property after approval of the voluntary response action plan;

(2) a person providing financing for response actions or development at the identified real property after approval of the response action plan, whether the financing is provided to the person undertaking the response actions or other person who acquires or develops the property; and

(3) a successor or assign of a person to whom the liability protection applies under this paragraph.

(d) When the commissioner issues a certificate of completion for response actions completed by a responsible person, the commissioner and the responsible person may enter into an agreement that resolves the person's future liability to the agency under sections 115B.01 to 115B.18 for the release or threatened release addressed by the response actions.

115B.177 Owner of real property affected by off-site release.

Subdivision 1. Determination or agreement by commissioner. (a) The commissioner may issue a written determination or enter into an agreement to take no action under sections 115B.01 to 115B.18 against a person who owns real property subject to a release of a hazardous substance, or pollutant or contaminant, if the commissioner finds that the release originates from a source on adjacent or nearby real property and that the person is not otherwise responsible for the release.

(b) A determination issued or agreement entered into under this section must be conditioned upon the following:

(1) agreement by the person to allow entry upon the property to the commissioner and the authorized representatives of the commissioner to take response actions to address the

release, including in appropriate cases an agreement to grant easements to the state for that purpose;

(2) agreement by the person to avoid any interference with the response actions to address the release taken by or at the direction of the agency or the commissioner, and to avoid actions that contribute to the release;

(3) invalidation of the determination or agreement if the commissioner receives new information indicating that the property owned by the person is a source of the release or that the person is otherwise responsible for the release; and

(4) any other condition that the commissioner deems reasonable and necessary to ensure that the agency and commissioner can adequately respond to the release.